

SAMSUNG

GSM TELEPHONE

EK-GN120 / GN100 Common

***SERVICE* Manual**

GSM TELEPHONE

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**SAMSUNG
ELECTRONICS**



1. Safety Precautions

1-1. Repair Precaution

Before attempting any repair or detailed tuning, shield the device from RF noise or static electricity discharges.

Use only demagnetized tools that are specifically designed for small electronic repairs, as most electronic parts are sensitive to electromagnetic forces.

Use only high quality screwdrivers when servicing products. Low quality screwdrivers can easily damage the heads of screws.

Use only conductor wire of the properly gauge and insulation for low resistance, because of the low margin of error of most testing equipment.

We recommend 22-gauge twisted copper wire.

Hand-soldering is not recommended, because printed circuit boards (PCBs) can be easily damaged, even with relatively low heat. Never use a soldering iron with a power rating of more than 100 watts and use only lead-free solder with a melting point below 250°C (482°F).

Prior to disassembling the battery charger for repair, ensure that the AC power is disconnected. Always use the replacement parts that are registered in the SEC system. Third-party replacement parts may not function properly.

1-2. ESD(Electrostatically Sensitive Devices) Precaution

Many semiconductors and ESDs in electronic devices are particularly sensitive to static discharge and can be easily damaged by it. We recommend protecting these components with conductive anti-static bags when you store or transport them.

Always use an anti-static strap or wristband and remove electrostatic buildup or dissipate static electricity from your body before repairing ESDs.

Ensure that soldering irons have AC adapter with ground wires and that the ground wires are properly connected.

Use only desoldering tools with plastic tips to prevent static discharge.

Properly shield the work environment from accidental electrostatic discharge before opening packages containing ESDs.

The potential for static electricity discharge may be increased in low humidity environments, such as air-conditioned rooms. Increase the airflow to the working area to decrease the chance of accidental static electricity discharges.

2. Specification

2-1. GSM General Specification

	WCDMA 2100	WCDMA 900	WCDMA 850	WCDMA 1900
Freq. Band[MHz] Uplink/ Downlink	1922~1977 2112~2167	880~915 925~960	824~849 869~894	1852~1907 1932~1987
ARFCN range	UL: 9612~9888 DL: 10562~10838	UL: 2712~2863 DL: 2937~3088	UL: 4132~4233 DL: 4357~4458	UL: 9612~9888 DL: 10562~10838
Tx/Rx spacing	190MHz	45MHz	45MHz	80MHz
Mod. Bit rate/ Bit Period	3.84Mcps	3.84Mcps	3.84Mcps	3.8Mcps
Time Slot Period/ Frame Period	FrameLength: 10ms Slotlength: 0.667ms	FrameLength: 10ms Slotlength: 0.667ms	FrameLength: 10ms Slotlength: 0.667ms	FrameLength: 10ms Slotlength: 0.667ms
Modulation	QPSKHQPSK	QPSKHQPSK	QPSKHQPSK	QPSKHQPSK
MS Power	24dBm~ -50dBm	24dBm~ -50dBm	24dBm~ -50dBm	24dBm~ -50dBm
Power Class	3(max+24dBm)	3(max+24dBm)	3(max+24dBm)	3(max+24dBm)
Sensitivity	-106.7dBm	-106.7dBm	-106.7dBm	-106.7dBm
TDMA Mux	8	8	8	8
Cell Radius	2Km	2Km	2Km	2Km

2-2. GSM Tx Power Class

2-3. LTE General Specification

	LTE Band1	LTE Band3	LTE Band5	LTE Band7	LTE Band8	LTE Band20
Freq. Band[MHz] Uplink/ Downlink	1920~1980 2110~2170	1710~1785 1805~1880	824~849 869~894	2500~2570 1805~1880	880~914.9 925~959.9	832~862 791~821
ARFCN range	UL: 18000~18599 DL: 0~599	UL: 19200~19950 DL: 1805~1880	UL: 20400~20649 DL: 2400~2649	UL: 2500~2570 DL: 2620~2690	UL: 21450~21799 DL: 3450~3799	UL: 24150~24450 DL: 6150~6450
Tx/Rx spacing	190MHz	95MHz	45MHz	120MHz	45MHZ	-41MHz
Channel Bandwidth	5/10/15/20 MHz	1.4/3/5/10/15/20 MHz	1.4/3/5/10 MHz	5/10/15/20 MHz	1.4/3/5/10MHz	5/10/15/20 MHz
Modulation	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM
MS Power (MPR)	-35~25.7 dBm	-35~25.7 dBm	-35~25.7 dBm	-35~25.7 dBm	-35~25.7 dBm	-35~25.7 dBm
Sensitivit (QPSK) (BW 10MHz)	-94 dBm	-92 dBm	-92 dBm	-95dBm	-95dBm	-94dBm
Cell Radius	>5Km	>5Km	>5Km	>5Km	>5Km	>5Km

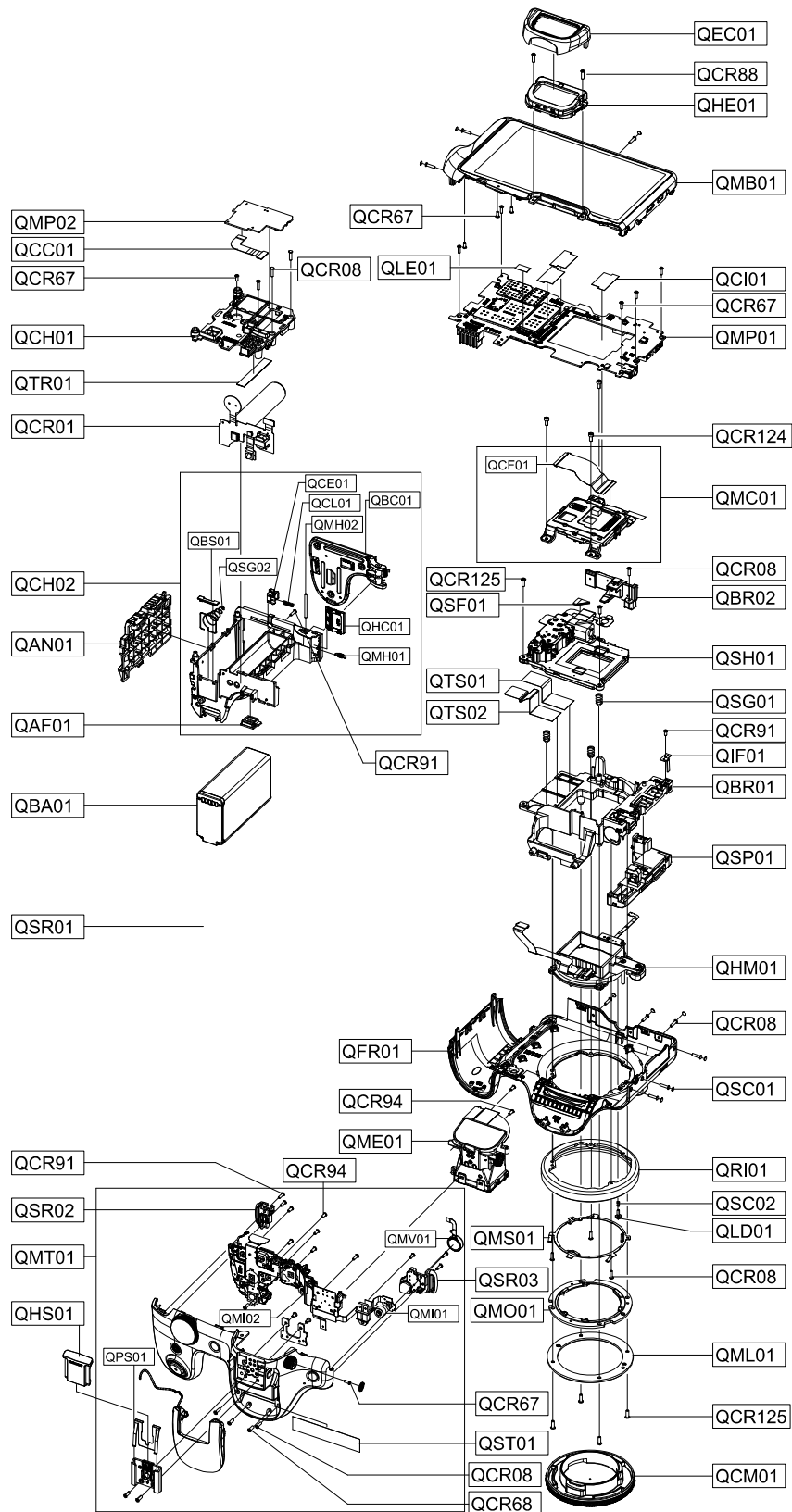
3. Operation Instruction and Installation

Main Function

- Android OS: Android 4.2 JellyBean
- Exynos4412 1.6GHz Quad
- HSPA+ 42/5.76Mbps / LTE 100/50Mbps
- 20.3MP Interchangeable Lens with Xenon Flash
- 4.8 TFT LCD MIPI (C-Type)
- A-GPS / BT v4.0 USB v2.0 / WiFi (802.11 a/b/g/n) 2.4 + 5GHz
- Recording definition: 1980p / Playback at 1980p resolution
- Sensors: Accelerometer, Geo-magnetic, Gyro, Proximity, Illumination

4. Exploded View and Parts List

4-1. Cellular phone Exploded View



4-2. Cellular phone Parts list

Design LOC		Description	SEC CODE
QCR08		SCREW-MACHINE	6001-001611
QCR67		SCREW-MACHINE	6001-002083
QCR91		SCREW-MACHINE	6001-002260
QCR125		SCREW-MACHINE	6001-002662
QCR68		SCREW-TAPPING	6002-001399
QCR88		SCREW-TAPPING	6002-001423
QSG01		SPRING-CS	6107-002736
QLE01		TAPE ETC-LENS IF	AD02-00166A
QCI01		TAPE ETC-CIS 2	AD02-00167A
QST01		TAPE ETC-STROBO	AD02-00171A
QTS01		GRAPHITE THERMAL SHEET-EK-GN120 GRAPHITE	AD02-00196A
QTS02		GRAPHITE THERMAL SHEET-EK-GN120 GRAPHITE	AD02-00197A
QHS01		COVER-HOT SHOE	AD63-07539A
QEC01		COVER-EP CAP (D)	AD63-07610A
QSC01		SHEET-SCREW CAP	AD63-07641A
QCC01		UNIT-CTC FPCB ASSY	AD59-00219A
QBA01		BATTERY-4360MAH	AD43-00208A
QSR01		STRAP-NX20	AD63-07020A
QSH01		ASSY-SHUTTER	AD97-23001A
QSC02		SPRING-CS	6107-001781
QML01		PLATE-MOUNT LENS	AD61-05284A
QMO01		MOUNT-INNER	AD61-05307A
QMS01		PLATE-MOUNT SPRING	AD61-05314A
QIF01		PLATE-IF	AD61-06072A
QRI01		DECORATION-RING	AD64-03968A
QLD01		SHAFT-LENS DETECT	AD66-00945A
QCM01		CAP-MOUNT	AD67-02616A
QSP01		ASSY SPEAKER-SPK (EK-GN100)	AD96-00008A
QHM01		MEA ETC-HOLDER INNER MOUNT	AD97-23827A
QCH01		COVER-CHAMBER BACK	AD63-07544A
QAF01		RUBBER-AF WINDOW	AD67-02733A
QCH02		ASSY CASE-SUB CHAMBER	AD98-14939A
	QMH01	SPRING ETC-MOVING HINGE	AD61-06085A
	QCL01	SPRING ETC-CELL LOCKER	AD61-06087A
	QHC01	COVER-HINGE	AD63-07537A
	QBS01	DECORATION-BATT SRPRING	AD64-03945A
	QCE01	LOCKER-CELL	AD64-03953A
	QMH02	DECO PIN-MOVING HINGE SHAFT	AD64-03971A
	QBC01	ASSY COVER-BATT	AD98-14891A
	QSG02	SPRING-ETC	6107-002737

Design LOC		Description	SEC CODE
QTR01		SPONGE-TRACNE	AD02-00139A
QAN01		ANTENNA-MAIN (EK_GN120)	AD42-00041A
QCR01		UNIT-CONDENSOR FPCB ASSY	AD59-00218A
QFR01		ASSY CASE-FRONT	AD98-14896A
QBR01		ASSY BRACKET-HOLDER MOUNT	AD98-14902A
QMB01		MEA ETC-BACK (EK-GN120)	AD97-23714A
QHE01		ASSY COVER-HOLDER EP CAP	AD98-14936A
QBR02		ASSY BRACKET-TRIPOD	AD98-15017A
QSF01		ASSY RUBBER-SHUTTER FPCB	AD98-15018A
QCR124		SCREW-MACHINE	6001-002279
QMC01		MEA ETC-CMOS (EK-GN120)	AD97-23840A
	QCF01	FPC-CIS FPCB	AD41-02014A
QMT01		MEA ETC-TOP (EK-GN120)	AD97-23713A
	QMI01	MICROPHONE-ASSY-EK-GN120	AD30-00007A
	QMI02	MICROPHONE-ASSY-EK-GN120	AD30-00008A
	QMV01	MOTOR LINEAR VIBRATION	AD31-00101A
	QPS01	PLATE-SPRING SHOE	AD61-06127A
QSR02		ASSY DECO-HOLDER STRAP R	AD98-14934A
QME01		MEA ETC-ASSY EVF	AD97-23826A
QSR03		ASSY DECO-HOLDER STRAP L	AD98-14951A
QMP01		A/S ASSY-PBA SUB(COMM)	AD82-00988A
QMP02		A/S ASSY-PBA SUB(COMM)	AD82-00988A

5. MAIN Electrical Parts List

SEC Code	Design LOC	Description
0401-001141	D11000	1SS400G
0403-001688	D700,D901	USFZ5.6V-RTK/H
0404-001250	D500	RB520G-30
0404-001646	D900	PMEG4005EJ
0404-001669	D11001	PMEG6020EPA
0406-001223	ZD900	PG05DBTFC
0406-001267	C784,L810,ZD803	RCLAMP0521P
0406-001369	C915	RCLAMP3654P.TCT
0406-001413	VAR800,VAR801,VAR802,VAR803,ZD801,ZD802,ZD804,ZD805,ZD806,ZD807,ZD808	PESD5V0F1BL
0406-001596	ZD901,ZD902,ZD903,ZD904	RCLAMP0521Z-TNT
0504-001171	Q11000,Q11004,Q903	DTC114YM
0504-001284	Q11003	KRC841T
0505-002088	Q10000,Q10002	2SK3541
0505-002341	Q10001,Q11002,Q500,Q700	SI1013X-T1-GE3
0505-002384	Q800,Q901	PMR280UN
0505-002388	Q11001	RUE003N02
0505-002652	Q10003,Q10004,Q10005,Q10006	RUM002N02GT2L
0505-002720	Q902	SI7615DN-T1-GE3
0505-002990	TR11000	TPCP8203
0601-001905	LED800	SSC-THBTGFR421
0801-003024	U11010	TC7SG32AFS
0801-003079	U909	NC7WZ17L6X
0801-003206	U907,U908	74LVC1G74GM
0801-003437	U800	NL17SG32P5T5G
0902-002966	UCP600	SC54412BHB-A030
1001-001650	U10011	DG2750DN-T1-E4
1001-001736	U1003,U1004	XM0825SE-BL0901
1003-002337	U806	AN30259A
1003-002438	U11000	BD65494MUV
1003-002539	U807,U808	NLSX4302EBMUTCG
1006-001488	U902	TPD12S015YFFR
1107-002239	UME600	KLMAG2GEAC-B002
1108-000515	U11002	MT29RZ4B4DZZHGPL-18W-80U
1201-003497	PA1000	RF7320
1201-003524	U202	BGA825L6S
1201-003561	PA1001	RF7307
1201-003562	U1000	RF7388

1202-001120	U805,U901	NCX2200GM
1203-004819	U803,U906	RP103K281D-TR
1203-005574	U11003	RP103K121D-TR
1203-006341	U11005	TPS63020DSJ
1203-006768	R900	TPS63010YFFR
1203-006834	U11004	ISL97656IRTZ-TK
1203-007133	U10004	BD9361GUL
1203-007321	U701	MAX77693EWQ+T
1203-007322	U700	MAX77686EWE+T
1203-007387	U900	KTD251EHD-TR
1203-007583	U400	PM8018
1203-007623	TR700,TR900	MAX14634EWC+T
1203-007778	U301	LM3262TMX
1203-007795	U904	MAX14654EWC-T
1205-004509	U804	WM1811AECS
1205-004513	U10001,U10002,U10003,U11001,U11006,U11007,U11008,U11009	SIP32408DNP-T1-GE4
1205-004566	U300	WTR1605L
1205-004647	UCP500	MDM9215M
1205-004719	U602	NCP338FCCT2G
1205-004844	U10007	TC358746XBG
1209-002124	U208	AK8963C
1209-002209	U210	K330TR
1404-001724	TH1000	NCP03WF104F05RL
1404-001749	TH600,TH601	NTCG064BF473JT
1405-001177	V900,V901,V902,V903,V904,V905	AVLC-5S-01-015
1405-001200	V10000	AVLC5S01100
1405-001201	V11000	AVLC5S01050
1405-001346	VR801,VR803	LXES15AAA1-117
1405-001359	V10002,V920	AVL14K02200SBF
2007-000141	R665,R666	RC1005J222CS
2007-000143	R968	RC1005J472CS
2007-001292	R738	RC1005J330CS
2007-001308	R520	RC1005J201CS
2007-003010	R906	RC1005J200CS
2007-007107	R908	RC1005F1003CS
2007-007133	R926,R930	MCR01MZP5F3000
2007-007134	R10018,R11024,R834	RC1005F393CS
2007-007136	R685	RC1005F472CS

2007-007139	R10127,R913	MCR01MZP5F4702
2007-007311	R915	MCR01MZP5F2202
2007-007312	R693,R694	MCR01MZP5F2002
2007-007315	R11026	MCR01MZP5F3901
2007-007517	R661,R662,R691,R692	MCR01MZP5F2400
2007-007573	R829	RK73H1ETP3303F
2007-007590	R10011,R10123,R11030,R627	RK73H1ETP8202F
2007-007741	R10080,R10087,R11014,R11015,R11016,R11017,R11029,R659,R664,R708,R709	M5534204B10E0R
2007-007798	R912	RC1005F0100CS
2007-007861	R10024	RK73H1ETP6202F
2007-007942	R832,R901,R910,R914	RC-1005F105CS
2007-008040	R849	ERJ1GEJ470X
2007-008044	R1006,R11037	MCR006MZPJ680
2007-008045	R10651,R11031,R11033,R909	ERJ1GEJ101C
2007-008049	R528,R985,R986,R996,R997,R998	MCR006YZPJ202
2007-008052	R10038,R10039,R10040,R10041,R10045,R10047,R10064,R10066,R10625,R10628,R10647,R10649,R11000,R11001,R11002,R11003,R11004,R11005,R11008,R11009,R11010,R11011,R11012,R11013,R678,R679,R686,R710,R905	ERJ1GENJ472X
2007-008055	R10003,R10005,R10012,R10017,R10023,R10029,R10044,R10050,R10051,R10052,R10150,R10157,R10158,R10623,R10624,R10632,R10636,R10639,R10640,R10641,R10642,R10643,R10644,R10645,R11019,R11020,R11021,R11032,R612,R613,R614,R615,R663,R681,R684,R695,R696,R705,	ERJ1GENJ104X
2007-008055	R11032,R612,R613	ERJ1GENJ104X
2007-008055	R614,R615,R663,R681	ERJ1GENJ104X
2007-008055	R684,R695,R696,R705	ERJ1GENJ104X
2007-008055	R722,R810,R918,R919	ERJ1GENJ104X
2007-008055	R924,R925,R938,R939	ERJ1GENJ104X
2007-008055	R940,R951,R955,R969	ERJ1GENJ104X
2007-008055	R970,R971,R972,R973	ERJ1GENJ104X
2007-008055	R981,R983	ERJ1GENJ104X
2007-008213	R929,R931	ERJ2RKF4301X
2007-008401	R11028	RC1005F754CS
2007-008403	R717	RC1005F364CS
2007-008419	R10014,R10085,R10144	ERJ1GEJ102C
2007-008419	R10145,R10146,R10147	ERJ1GEJ102C
2007-008419	R10650,R10669,R619	ERJ1GEJ102C
2007-008420	R823,R907	RMC-1/20-330JPA

2007-008478	R620,R621,R655,R656	RMC1/20152JPA
2007-008483	R10019,R10026,R10030	RMC1/20473JPA
2007-008483	R10031,R10057,R10058	RMC1/20473JPA
2007-008483	R10059,R10060,R10061	RMC1/20473JPA
2007-008483	R10067,R10069,R10070	RMC1/20473JPA
2007-008483	R10081,R10100,R10101	RMC1/20473JPA
2007-008483	R10110,R10111,R10112	RMC1/20473JPA
2007-008483	R10113,R10114,R10115	RMC1/20473JPA
2007-008483	R10117,R10128,R10142	RMC1/20473JPA
2007-008483	R10148,R10159,R10160	RMC1/20473JPA
2007-008483	R10161,R10162,R10637	RMC1/20473JPA
2007-008483	R10652,R10660,R10661	RMC1/20473JPA
2007-008483	R203,R204,R205,R206	RMC1/20473JPA
2007-008483	R207,R542,R964,R965	RMC1/20473JPA
2007-008483	R966,R967	RMC1/20473JPA
2007-008486	R700,R704,R716	ERJ1GEJ204C
2007-008516	R10007,R10033,R10034	ERJ1GEJ103C
2007-008516	R10056,R11038,R502	ERJ1GEJ103C
2007-008516	R504,R505,R535,R536	ERJ1GEJ103C
2007-008516	R537,R600,R601,R605	ERJ1GEJ103C
2007-008516	R606,R609,R610,R611	ERJ1GEJ103C
2007-008516	R625,R626,R635,R644	ERJ1GEJ103C
2007-008516	R647,R683,R690,R825	ERJ1GEJ103C
2007-008516	R826,R904,R963,R982	ERJ1GEJ103C
2007-008516	R984	ERJ1GEJ103C
2007-008544	R10109	ERJ1GEJ681C
2007-008588	R10121,R10122,R10138	MCR006YZPJ222
2007-008588	R10139,R808,R809	MCR006YZPJ222
2007-008588	R840,R841,R843	MCR006YZPJ222
2007-008708	R932,R933,R936,R937	ERJ2RKF40R2X
2007-008726	R902	RC1005F114CS
2007-008774	R10663,R10664,R10668	ERJ1GEJ2R2C
2007-008774	R541,R543,R682,R697	ERJ1GEJ2R2C
2007-008774	R804,R805,R806,R807	ERJ1GEJ2R2C
2007-008774	R927,R928,R975,R980	ERJ1GEJ2R2C
2007-008774	R987,R988,R989,R990	ERJ1GEJ2R2C
2007-008774	R991,R992,R993	ERJ1GEJ2R2C
2007-008786	R11025	RMC1/20K333JTP

2007-008798	R703	MCR006YZPJ153
2007-008800	R657,R658,R845	MCR006MZPF2002
2007-008808	R10635	MCR006YZPJ823
2007-008816	R634	MCR006MZPJ822
2007-009084	R10071,R10108,R632	MCR006YZPJ105
2007-009084	R649,R701,R702,R820	MCR006YZPJ105
2007-009084	R821,R828,R831	MCR006YZPJ105
2007-009111	R622,R646	RC0603J220CS
2007-009157	R10015,R10016,R1005	MCR006YZPF1003
2007-009157	R407,R628,R629,U603	MCR006YZPF1003
2007-009157	U604	MCR006YZPF1003
2007-009171	R308,R636,R637,R638	MCR006YZPJ513
2007-009171	R639,R640,R641,R642	MCR006YZPJ513
2007-009171	R643,R645	MCR006YZPJ513
2007-009212	R11006,R11007,R302	MCR006YZPF1001
2007-009212	R524,R800,R801,R813	MCR006YZPF1001
2007-009358	R301	RC1005F4751CS
2007-009408	R623,R624,R651,R652	ERJ1GEF222C
2007-009408	R653,R654,R673,R674	ERJ1GEF222C
2007-009410	R10068,R616	RC0603F123CS
2007-009801	R1007,R1008,R839	MCR006YZPF1000
2007-009801	R848	MCR006YZPF1000
2007-009920	R10082,R11022,R523	RC0603F241CS
2007-009920	R527	RC0603F241CS
2007-009964	R680	MCR01MZP5F44R2
2007-009969	R802,R803,R814	MCR006YZPF1201
2203-000233	C1006,C1040,C1041	GRP1555C1H101J
2203-000233	C1080,C1094,C1095	GRP1555C1H101J
2203-000233	C211,C236,C237	GRP1555C1H101J
2203-000386	C849	GRP1555C1H150J
2203-000489	C10000,C10001,C657	GRP155R71H222K
2203-000714	C10031,C658,C661	04025C332KAT2A
2203-000725	C781	GRP155R71H392KA01E
2203-000812	C848	GRP1555C1H330J
2203-001101	C785	GRP155R71E682KA01E
2203-001239	C788	GRP1555C1H820JD01E
2203-002668	C1009	C1005CG1H0R5BT
2203-005682	C1011,C1042,C1045	GRP0335C1E330JD01E

2203-005682	C1050,C1054,C1099	GRP0335C1E330JD01E
2203-005682	C300,C818	GRP0335C1E330JD01E
2203-005683	C1001,C1086,C789	GRP0335C1E8R0DD01E
2203-005717	C663,C706,C790,C791	GRP0335C1E270JD01E
2203-005717	C792,C793,C794,C795	GRP0335C1E270JD01E
2203-005725	C705	GRP0335C1E220JD01E
2203-005727	C10035,C10036,C779	CL03C120JA3GNNC
2203-005729	C1037,C327,C802,C803	CL03C150JAGC
2203-005729	C815	CL03C150JAGC
2203-005731	C10069,C10070,C625	GRM0335C1E180J
2203-005731	C626	GRM0335C1E180J
2203-005734	C11029	GRM0335C1E820JD01D
2203-005736	C1015,C1033,C1084	GRP0335C1E101JD01E
2203-005736	C1085,C1087,C1088	GRP0335C1E101JD01E
2203-005736	C1090,C210,C212,C218	GRP0335C1E101JD01E
2203-005736	C219,C221,C241,C301	GRP0335C1E101JD01E
2203-005736	C306,C329	GRP0335C1E101JD01E
2203-005777	C1052,C1075,C1079	CL03C010CA3GNNC
2203-005789	C1005,C1013,C1038	ECJZEC1E0R5B
2203-005789	C1093	ECJZEC1E0R5B
2203-005806	C428,L1000	GRP033R71C102KD01E
2203-006048	C662,C847	GRM155R71A104K
2203-006187	C1060	GRM0335C1E3R9B
2203-006190	C949	GRM155R60J224KE01E
2203-006194	C328,C650	GRP033R70J103KA01E
2203-006305	C1036,C819	CM03CG100J25AH
2203-006348	C951	CV105X5R105K25AT
2203-006379	C11031,C324	GRP033R70J472KA01
2203-006399	C703,C817,C903,C948	GRM155R60J105KE19D
2203-006399	C950	GRM155R60J105KE19D
2203-006410	C1058	CL03C1R8CA3GNNC
2203-006423	C10041,C10042,C1017	GRM33X5R104K6.3
2203-006423	C1098,C406,C519,C600	GRM33X5R104K6.3
2203-006423	C602,C605,C609,C615	GRM33X5R104K6.3
2203-006423	C636,C643,C644,C656	GRM33X5R104K6.3
2203-006423	C700,C701,C704,C772	GRM33X5R104K6.3
2203-006423	C778,C806,C810,C838	GRM33X5R104K6.3
2203-006556	C10033,C10034,C823	GRM0335C1E470JD01D

2203-006562	C775,C776,C844,C845	CV05X5R105K10AH
2203-006642	C616,C618,C622	GRM033R71E331KA01D
2203-006648	C10002,C11026	GRM033R60J223KE01D
2203-006665	C1077,C1078	GRM0335C1E2R2CD01D
2203-006681	C902	GRM155F51E104ZA01D
2203-006839	C10003,C10004,C10005	CL03A104KP3NNNC
2203-006839	C10006,C10007,C10008	CL03A104KP3NNNC
2203-006839	C10009,C10010,C10011	CL03A104KP3NNNC
2203-006839	C10014,C10015,C10016	CL03A104KP3NNNC
2203-006839	C10017,C10018,C10019	CL03A104KP3NNNC
2203-006839	C10020,C10022,C10023	CL03A104KP3NNNC
2203-006839	C10024,C10025,C10026	CL03A104KP3NNNC
2203-006839	C10027,C10028,C10029	CL03A104KP3NNNC
2203-006839	C10047,C10048,C10049	CL03A104KP3NNNC
2203-006839	C10050,C10051,C10052	CL03A104KP3NNNC
2203-006839	C10053,C10054,C10055	CL03A104KP3NNNC
2203-006839	C10056,C10057,C10058	CL03A104KP3NNNC
2203-006839	C10059,C10060,C10061	CL03A104KP3NNNC
2203-006839	C10062,C10063,C10064	CL03A104KP3NNNC
2203-006839	C10065,C10066,C10067	CL03A104KP3NNNC
2203-006839	C10068,C10073,C10074	CL03A104KP3NNNC
2203-006839	C10075,C10076,C10077	CL03A104KP3NNNC
2203-006839	C10078,C10079,C10080	CL03A104KP3NNNC
2203-006839	C10081,C10082,C10083	CL03A104KP3NNNC
2203-006839	C10084,C10085,C10086	CL03A104KP3NNNC
2203-006839	C10087,C10088,C10089	CL03A104KP3NNNC
2203-006839	C10090,C10091,C10092	CL03A104KP3NNNC
2203-006839	C10108,C10109,C10110	CL03A104KP3NNNC
2203-006839	C1081,C11000,C11001	CL03A104KP3NNNC
2203-006839	C11004,C11005,C11006	CL03A104KP3NNNC
2203-006839	C11007,C11010,C11011	CL03A104KP3NNNC
2203-006839	C11012,C11013,C11014	CL03A104KP3NNNC
2203-006839	C11015,C11016,C11017	CL03A104KP3NNNC
2203-006839	C11018,C11020,C11021	CL03A104KP3NNNC
2203-006839	C11022,C231,C242	CL03A104KP3NNNC
2203-006839	C245,C304,C305,C307	CL03A104KP3NNNC
2203-006839	C308,C309,C310,C311	CL03A104KP3NNNC
2203-006839	C312,C313,C314,C315	CL03A104KP3NNNC

2203-006839	C316,C317,C318,C319	CL03A104KP3NNNC
2203-006839	C427,C766,C767,C911	CL03A104KP3NNNC
2203-006841	C10021,C11032,C11033	CV05X5R105K16AH
2203-006841	C11039,C11040,C11041	CV05X5R105K16AH
2203-006841	C11042,C11043,C11044	CV05X5R105K16AH
2203-006841	C322,C762,C782,C941	CV05X5R105K16AH
2203-006872	C326,C601,C608,C614	GRM155R60J225ME15D
2203-006872	C630,C634,C641,C642	GRM155R60J225ME15D
2203-006872	C645,C653,C707,C708	GRM155R60J225ME15D
2203-006872	C709,C710,C711,C717	GRM155R60J225ME15D
2203-006872	C726,C727,C732,C734	GRM155R60J225ME15D
2203-006872	C741,C745,C746,C747	GRM155R60J225ME15D
2203-006872	C753,C754,C832,C834	GRM155R60J225ME15D
2203-006872	C835	GRM155R60J225ME15D
2203-006896	C1000,C1010,C1028	GRM033R71E121KA01D
2203-006896	C1029,C1030,C1031	GRM033R71E121KA01D
2203-006896	C1061,C1062,C1063	GRM033R71E121KA01D
2203-006896	C1064,C1097	GRM033R71E121KA01D
2203-006979	C774,C954,C955	CL03B103KP3NNNC
2203-007194	C956,C957	CL03C6R8BA3GNNC
2203-007210	C651,C654,C655,C702	CV03X5R224K06AH
2203-007240	C408,C409,C410,C412	CL10A226MQ8NRNE
2203-007240	C635,C756,C757,C758	CL10A226MQ8NRNE
2203-007240	C759,C760,C770,C907	CL10A226MQ8NRNE
2203-007240	C931,C940	CL10A226MQ8NRNE
2203-007269	C768,C909,C924	CL21A226MPCLRNC
2203-007270	C900,C901,C925,C935	CL10A106KP8NNNC
2203-007270	C942	CL10A106KP8NNNC
2203-007271	C912	CL05A225KP5NSNC
2203-007317	C232,C603,C606,C610	CV05X5R475M06AH
2203-007317	C638,C652,C719,C720	CV05X5R475M06AH
2203-007317	C721,C722,C723,C724	CV05X5R475M06AH
2203-007317	C751,C752,C755,C761	CV05X5R475M06AH
2203-007317	C763,C805,C811,C812	CV05X5R475M06AH
2203-007317	C822	CV05X5R475M06AH
2203-007385	C246,C627,C631	CL05A106MR5NRNC
2203-007391	C10013,C1055,C1082	CL03A474KQ3NNNH
2203-007393	C1007,C906	CL05A475KP5NRNC

2203-007449	C10037,C10038,C10039	CL03A105MQ3CSNH
2203-007449	C10040,C10045,C10046	CL03A105MQ3CSNH
2203-007449	C11008,C11009,C11024	CL03A105MQ3CSNH
2203-007449	C11025,C11037,C11038	CL03A105MQ3CSNH
2203-007449	C11045,C11046,C320	CL03A105MQ3CSNH
2203-007449	C407,C418,C419,C420	CL03A105MQ3CSNH
2203-007449	C421,C422,C424,C425	CL03A105MQ3CSNH
2203-007449	C426,C500,C501,C502	CL03A105MQ3CSNH
2203-007449	C503,C504,C505,C506	CL03A105MQ3CSNH
2203-007449	C507,C508,C509,C510	CL03A105MQ3CSNH
2203-007449	C516,C604,C607,C611	CL03A105MQ3CSNH
2203-007449	C612,C613,C617,C619	CL03A105MQ3CSNH
2203-007449	C620,C621,C623,C624	CL03A105MQ3CSNH
2203-007449	C628,C629,C632,C633	CL03A105MQ3CSNH
2203-007449	C637,C639,C640,C646	CL03A105MQ3CSNH
2203-007449	C648,C718,C725,C728	CL03A105MQ3CSNH
2203-007449	C729,C730,C731,C733	CL03A105MQ3CSNH
2203-007449	C735,C736,C737,C738	CL03A105MQ3CSNH
2203-007449	C739,C740,C742,C743	CL03A105MQ3CSNH
2203-007449	C744,C748,C749,C750	CL03A105MQ3CSNH
2203-007449	C771,C773,C777,C780	CL03A105MQ3CSNH
2203-007449	C804,C809,C813,C816	CL03A105MQ3CSNH
2203-007449	C820,C837,C937,C938	CL03A105MQ3CSNH
2203-007449	C939,C952	CL03A105MQ3CSNH
2203-007474	C712,C713,C714,C715	CL05A106MQ5NUNC
2203-007474	C716	CL05A106MQ5NUNC
2203-007687	C914,C953,R911	CL10A474KB8NNNC
2203-007775	C230,C913	CV05X5R475M10AH
2203-007781	C10072,C10095,C10097	CL10A226MP8NUNE
2203-007781	C10099,C10101,C10123	CL10A226MP8NUNE
2203-007781	C10124,C11027,C11028	CL10A226MP8NUNE
2203-007781	C11034,C11035,C11036	CL10A226MP8NUNE
2203-007781	C932,C933	CL10A226MP8NUNE
2203-007795	C10093,C10096,C10098	CL05A106MP5NUNC
2203-007795	C10125,C11002,C11003	CL05A106MP5NUNC
2203-007795	C302,C303,C414,C415	CL05A106MP5NUNC
2203-007795	C416,C417,C764,C765	CL05A106MP5NUNC
2203-007795	C769,C800,C801,C904	CL05A106MP5NUNC

2203-007796	C1003,C10071,C1008	CL03A105MP3NSNC
2203-007796	C10094,C10103,C10112	CL03A105MP3NSNC
2203-007796	C10122,C1056,C1083	CL03A105MP3NSNC
2203-007796	C11019,C11023,C234	CL03A105MP3NSNC
2203-007796	C235,C423,C647,C649	CL03A105MP3NSNC
2203-007796	C814,C821,C824,C825	CL03A105MP3NSNC
2203-007796	C829,C830,C831,C833	CL03A105MP3NSNC
2203-007796	C905,C917,C918,C920	CL03A105MP3NSNC
2203-007796	C921	CL03A105MP3NSNC
2203-008094	C10030,C10107	CL03A473KP3NNNC
2203-008095	C786	CL03A224KP3NNNC
2203-008097	C10012,C10032,C11030	CL03A104KA3NNNC
2203-008097	C321	CL03A104KA3NNNC
2203-008123	C411	JDK212BBJ476MD-T
2203-008217	C323	CL10A226MP8NUNR
2203-008242	C413	CL03A225MQ3CRNC
2203-008243	C224,C517,C783	CL03A103KA3NNNC
2203-008527	C1002	CL05A106MP8NUB8
2203-008528	C405	CL10A226MPMNUBE
2203-008529	C400,C401,C402,C403	CL05A475MP7NRBC
2203-008529	C404	CL05A475MP7NRBC
2404-001506	TA700	TCTP1A476M8R-D
2404-001561	TA800	298D336X06R3M2T
2409-001243	BAT700	CPH3225A/PAS3225P
2603-000133	T11000	TTRN-060S-T-24-108
2703-001231	R720	LK1608-100K-T
2703-002207	L1056	CIH05T3N3SNC
2703-002309	R718,R719	CIH05T82NJNC
2703-002900	L1060,L1061	LLV0603-F27NJ
2703-002901	L1018	LLV0603-F15NJ
2703-002958	L1052	CIH03T56NJNC
2703-003004	L1055	LLV0603-F47NJ
2703-003293	L903	MLG1005SR12JT
2703-003686	L10002,L10003,L10005	CIG21L2R2MNE
2703-003687	L700,L707,L708,L709	CIG21L1R0MNE
2703-003687	L710,L902	CIG21L1R0MNE
2703-003913	L900	CIG22H2R2MNE
2703-004000	L209,L212	LQP03TN47NJ02D

2703-004025	L400,L401,L402,L403	1239AS-H-2R2N
2703-004030	L1010,L1049,L1063	LQP03TN22NJ02D
2703-004037	L1015,L1042,L1047	LQP03TN2N7B02D
2703-004037	L1051	LQP03TN2N7B02D
2703-004127	L10004,L404	PSE25201B-2R2MS-39
2703-004185	L301	CIG21LR47MNE
2703-004286	L1020,L1024,L1031	CIH03S3N3BNC
2703-004286	L1038,L1040	CIH03S3N3BNC
2703-004287	C1069,L1036,L1059	CIH03S3N9BNC
2703-004288	L1032,L1035	CIH03S2N7BNC
2703-004289	L1037	CIH03S2N2BNC
2703-004295	L1011,L1014,L200	AML0603E5N6JT
2703-004298	L1033	AML0603E12NJT
2703-004299	L1030	AML0603E1N8BT
2703-004300	L203,L204	CIH03S1N5BNC
2703-004301	C252,L1016	CIH03S1N2BNC
2703-004302	C233,L1021,L1022	AML0603E1N0BT
2703-004302	L1043,L1057,L1058	AML0603E1N0BT
2703-004302	L1062,L1066,L1067	AML0603E1N0BT
2703-004328	L1046	LQP03TN4N7H02D
2703-004338	L207	LQM18PN2R5ND0D
2703-004357	L901	LPH3010T-100M-R
2703-004362	L1068,L1069	LQP03TG12NJ02D
2703-004363	L1050,L1070,L1071	LQP03TG18NJ02D
2703-004366	L1019	LQP03TG6N8J02D
2703-004367	L1044,L1045	LQP03TG8N2J02D
2703-004368	L1053,L1054	LQP03TG15NJ02D
2703-004369	L1002,L1004,L1007	LQP03TG4N7J02D
2703-004371	L1003,L1025,L1026	LQP03TG10NJ02D
2703-004371	L1029	LQP03TG10NJ02D
2703-004599	L701,L702,L703,L704	LQM2HPN1R0MGHLS3
2703-004599	L705,L706,L711	LQM2HPN1R0MGHLS3
2703-004714	L11001	VLP5014ST-1R5N
2703-004717	L11000	VLP5014ST-2R2N
2801-005149	OSC10000,OSC10001	SQ2D02700D2JCG
2801-005163	OSC600	SQBD02400D2JCG
2801-005165	OSC400	CT2520DB19200C0FLHAF
2801-005230	OSC700	ST2012SB32768H5HPWA3

2901-001625	F907	ICMEF112P900MFR
2901-001647	F905,F906	ICMEF214P101MFR
2901-001690	C511,C512,C513,C514	NFM15PC435R0G3D
2901-001690	C515	NFM15PC435R0G3D
2901-001700	F908,F909,F910,F911	AVRC-18S-03Q-007-010R-SBF
2901-001700	F912,F913,F914	AVRC-18S-03Q-007-010R-SBF
2901-001752	F901	EMI4163MUTAG
2901-001753	F902	EMI4162MUTAG
2904-001959	F203	ACPF-7024-SG1
2904-001990	F201	SAFEA1G58FB0F00
2904-002017	F1003	SAFEA847MAM0F00
2904-002018	F1000	SAFEB1G74AA0F00
2904-002019	F1005	SAFEA2G53AB0F00
2904-002085	F200	SFHG89DQ102
2909-001376	F1002	LFL15869MTC1B787
2910-000186	F1004	ACMD-6107-SG1
2911-000242	F1001	LMSWKDGP-F10
2911-000243	U1002	HFQSW4WUA-191
3301-001534	L802	BLM15AG121SN1D
3301-001659	L211	BLM15AG601SN1
3301-001682	L405	BLM15AG700SN1D
3301-001756	L801	BLM15HG102SN1D
3301-001885	L803,L804	BLM15HD182SN1D
3301-001901	L10000,L10001	BLM18EG221SN1D
3301-001929	L800	BLM15AG100SN1D
3301-001956	L904	BLM21PG220SN1D
3301-001986	L300	BLM15PD600SN1
3301-002078	L805	BLM15AX102SN1D
3301-002228	L1001	BLM15PX330SN1
3701-001854	IFC901	DC3RX19JA3R1700
3705-001448	RFS200	20369-001E
3705-001866	RFS1000,RFS1001	KMS-563
3708-002222	SLC800	FH26-21S-0.3SHBW
3708-002436	SLC905	512810694
3708-002553	SLC900,SLC903	501628-5171
3708-002626	HDC901	501628-2171
3708-002891	SLC902	51281-1694
3708-003058	SLC700	TF37-6S-0.4SH

3708-003074	CN903	PF025-B08B-N07
3709-001570	CD800	SCHA5B0102
3709-001697	SIM800	SCGD1B0102
3711-007467	HDC400,HDC903,HDC904	AXE620124AW1
3711-007617	HDC902	14-5804-040-000-829
3711-008010	HDC800	503552-0620
3711-008011	HDC10000	14-5804-024-000-829
3711-008281	HDC900	14-5802-034-002-829+
3711-008550	BTC700	GSB254-5B-E400
3712-001482	ANT1000,ANT1001	HJ-ICT-1.3DP-NB
3712-001482	ANT1002,ANT1003	HJ-ICT-1.3DP-NB
3712-001482	ANT1004,ANT1005	HJ-ICT-1.3DP-NB
3712-001482	ANT200,ANT201	HJ-ICT-1.3DP-NB
3722-003632	IFC900	2108155-3
3722-003760	EAR800	7234-287000
4709-002149	U209	SWB-B52
AD13-00065A	U10000	DRIME4-COMPANION
AD13-00066A	U10006	DRIME4
AD63-07564A	SC200	SHIELDCAN-U-BTM3
AD98-14879A	SC203	SHIELDCAN-U-TOP4
AD98-14880A	SC204	SHIELDCAN-U-TOP1
AD98-14881A	SC201	SHIELDCAN-U-TOP2
AD98-14882A	SC202	SHIELDCAN-U-TOP3
GH62-00017A	CON200,CON201,CON202	SMR-TS-3-2-2
GH62-00017A	CON203,CON204	SMR-TS-3-2-2
GH62-00025A	CON205	SMR-TS-3-3-2
GH70-07767A	SC600,SC601,SC602	PTC1121N
GH70-07767A	SC603,SC604,SC605	PTC1121N
GH70-07767A	SC606,SC607,SC608	PTC1121N
GH70-07767A	SC611,SC612,SC613	PTC1121N
GH70-07767A	SC614,SC615,SC617	PTC1121N
GH70-07767A	SC618,SC619,SC620	PTC1121N
GH70-07767A	SC622,SC623,SC624	PTC1121N
GH70-07767A	SC625,SC626,SC627	PTC1121N
GH70-07767A	SC629	PTC1121N
GH80-03320A	R687	PB-SHORT-1005

Please consult the GSPN website (Samsung Portal) for the most recent version of the product's part list

6. Level 1 Repair

6-1. S/W installation

6-1-1. Required items in order to install S/W

- Installation program: Downloader Program (**Odin3 v3.08.exe**)
- EK-GN120
- Data Cable (GH39-01550A)
- ĺ Adapter (GH44-02437A)
- ĺ Serial Cable
- Mobile device specific S/W: Binary files

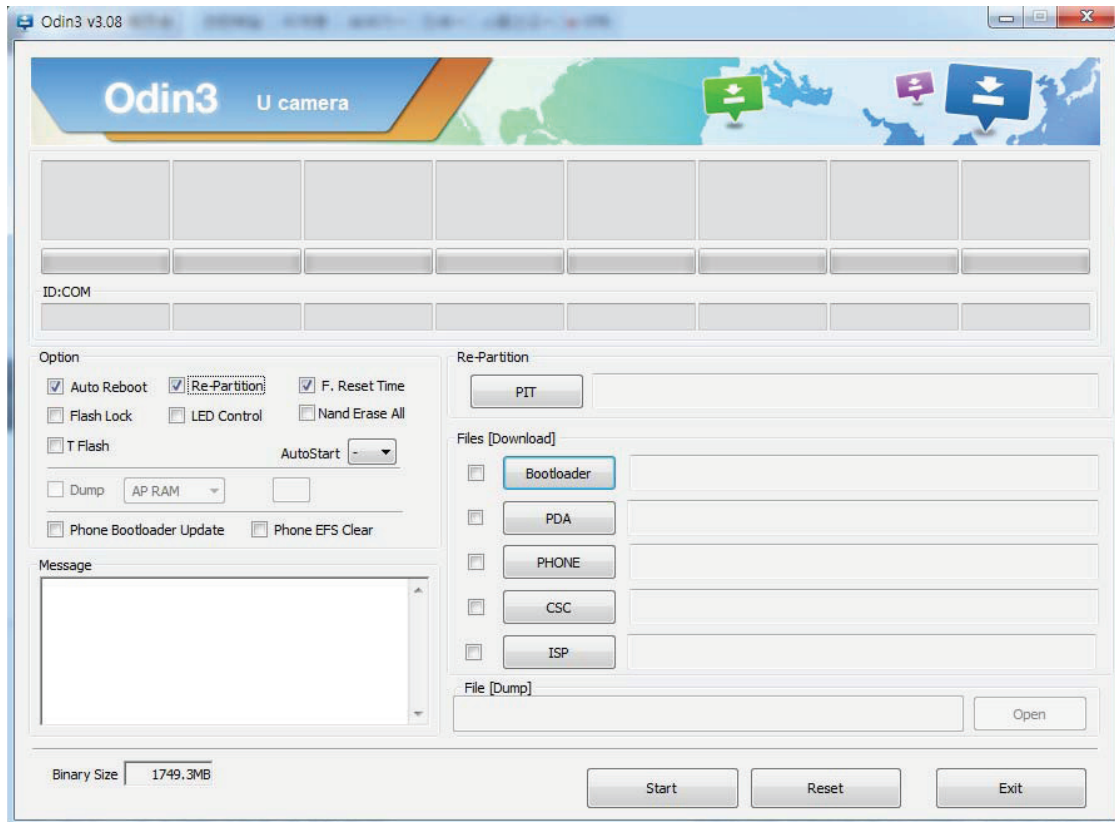
✂ Settings

Connect PC to Phone Using Data Cable



6-1-2. S/W Installation Program (Downloader program)

- Open up the S/W Installation Program by executing the **"Odin3 v3.08.exe"**

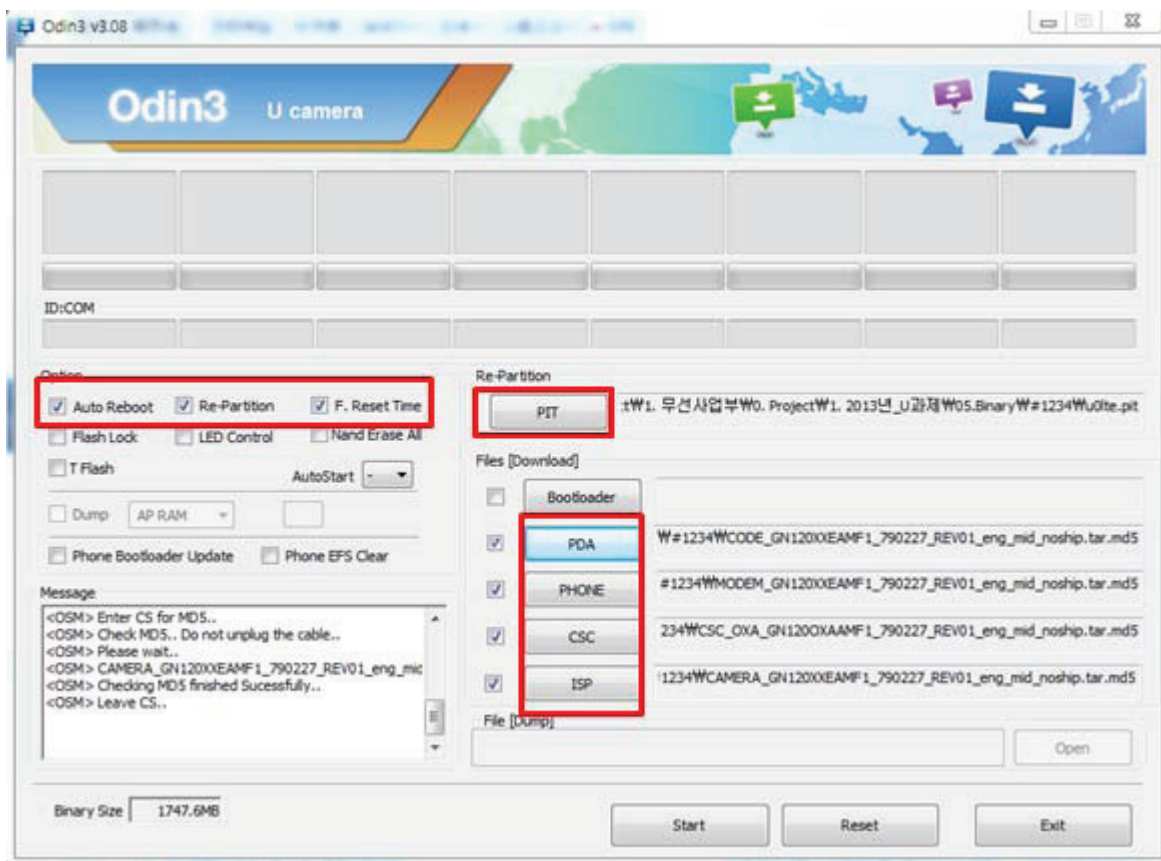


1. Enable the check mark by click on the following options,

- Check Auto Reboot, Re-Patision and F. Reset Time
- Check PIT
- Check PDA, PHONE, CSC, and ISP Files

2. Enter into Download Mode

- Reattach the battery to SET at 5-second intervals. Enter into Download Mode by pressing shutter key, and ON/OFF Button simultaneously. And after the LCD show the warning message, press shutter key in Warning Page to enter the Download Mode.

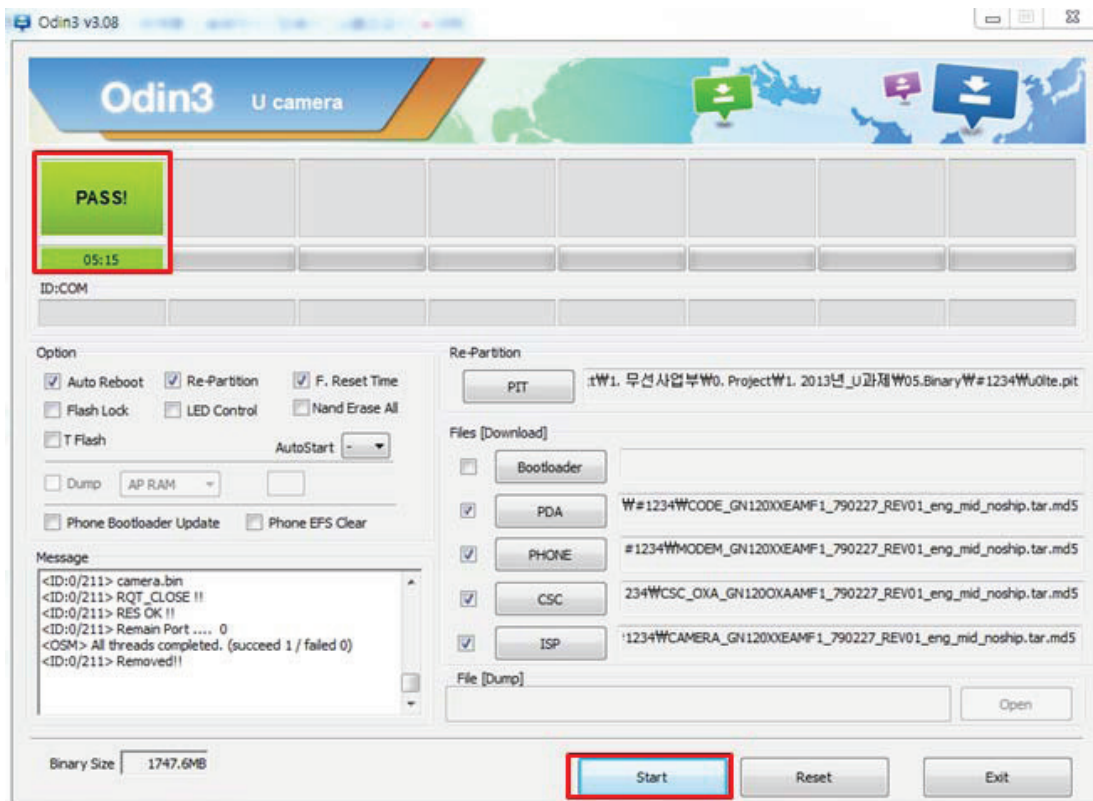
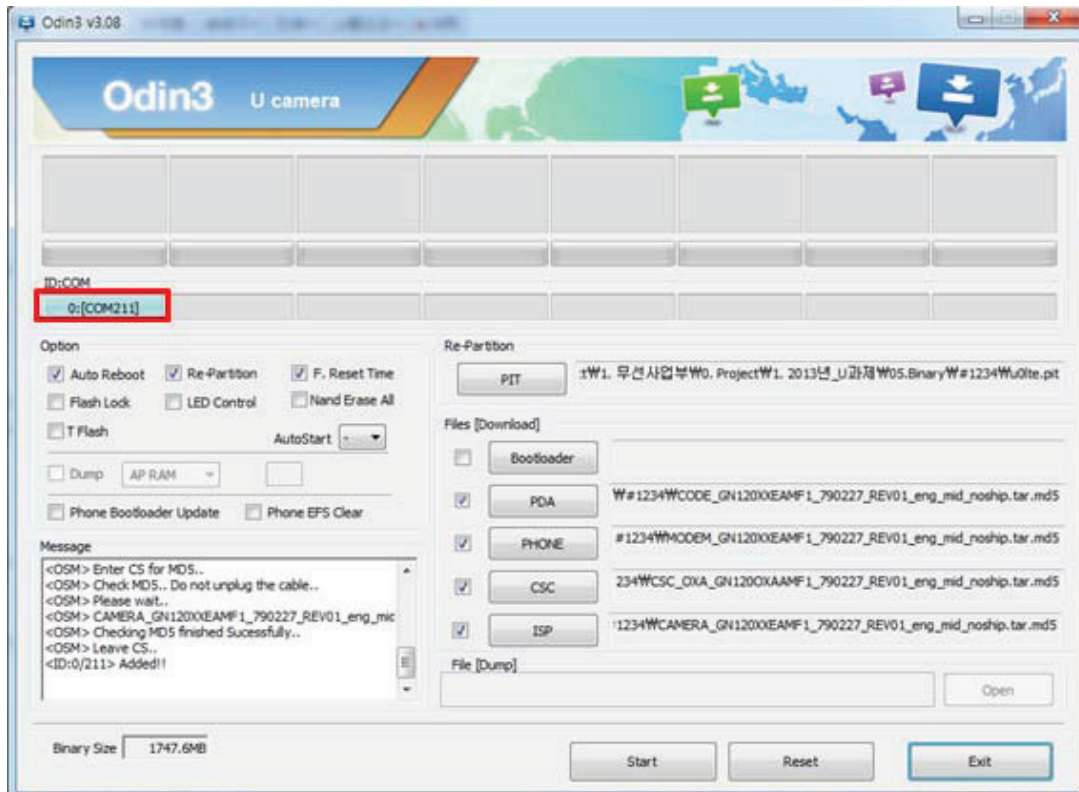


3. Connect the device to PC via Data Cable.

Make sure that the one of communication port [ID:COM] box is highlighted in light blue. The device is now connected with the PC and ready to download the binary file into the device.

4. Start downloading binary file into the device by clicking Start Button on the screen.

the green colored "PASS!" sign will appear on the upper-left box if the binary file has been successfully downloaded into the device.



5. Disconnect the device from the Data cable.
6. Once the device boots up, you can check the version of the binary file or name by the following steps.

Launch the built in calculator application, and type "(+30012012732+", it will make the device get into the factory mode.

Once the device gets into the factory mode, you can check the version of the binary file or name by pressing the following code in sequence;

***#1234#**

After the completion of download, it is no need to proceed full reset processing.

7. Level 2 Repair

7-1. Disassembly

- 1. We provide the general support. :
Samsung authorized service center will provide the service.
- 2. We provide the technical expertise support. :
After replacing the parts such as Main PBA, CMOS, Shutter and CMOS,
it is required to adjust these parts with the equipment specified below.
For more detail information, refer to chapter 7 Adjustment.

<Table. 3-1>

Repair Service	Parts	Items to be adjusted	Required equipment
General support	LCD, Back-Cover, Top	None	None
Technical expertise support	LENS Mount, Front-Cover	CMOS Tilt	CMOS-Tilt Shutter speed Light box (5,500K) Light box (3,350K)
	ASSY-CMOS	CMOS Tilt, AWB (Light box)	
	Shutter	Shutter Speed	
	MAIN PBA	AWB (Light box)	

7-1-1. General support - Disassembly

1

HOTSHOE CAP



Remove the **HOTSHOE CAP**

2

RUBBER EP CAP



Remove the **RUBBER EP CAP**

3



4



Remove the **2 screws**.

Remove the **ASSY HOLDER EP CAP**

5



6



Remove the **3** on the left side, **2 SCREW CAP** on the right side and **4 SCREW CAP** on the bottom side.

Remove the **3screws** on the left side, **2screws** on the right side and **4screws** on the bottom side.

7

**CAUTION**

Be careful when Remove the Grip to force lock and antenna damaged.



Open Battery Cover and
Remove the Grip with disassembly tool

8

**CAUTION**

Be careful Pull it toward you
with disassembly tool or
Decomposed into force when
lock damaged.

Decomposed into force when
lock damaged.



Remove the **Bottom** with disassembly tool
in the direction of the arrow.

9



Remove the **Bottom Part the end** with disassembly tool

10

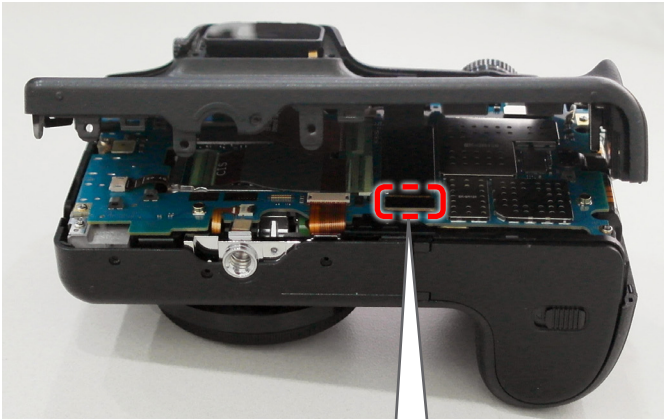


Remove the earphone jack external and Strap hook part
with tweezers

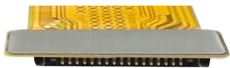
11

CAUTION

Use extra care when removing the FPCB from the connector.

**Fig. A**

Remove the FPCB

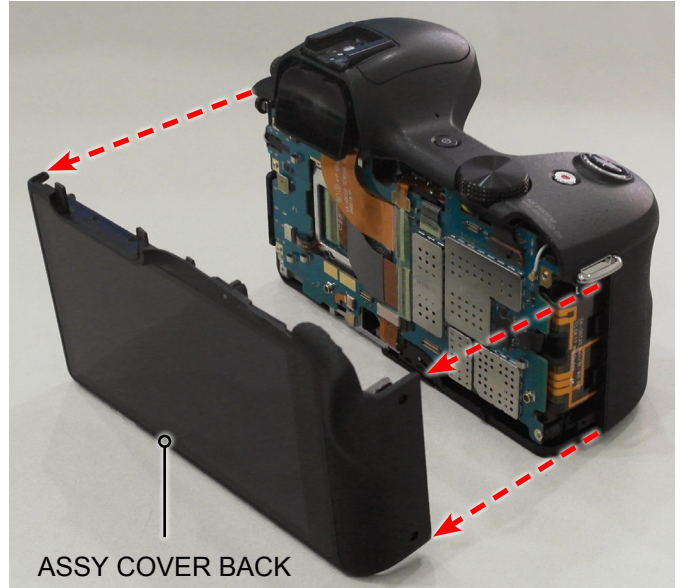


1. It is installed.



2. Remove.

12



ASSY COVER BACK

Remove the **FPCB** from the connector as illustrated in **Fig. A**.

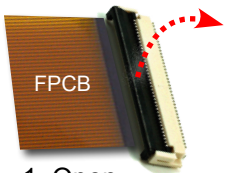
Remove the **ASSY COVER BACK**.

13

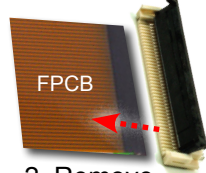
CAUTION

Use extra care when removing the FPCB from the connector.

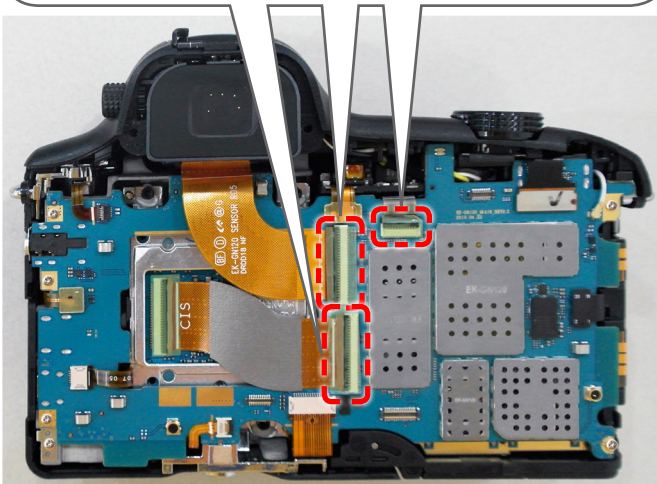
Remove the FPCB from the connector.

Fig. B

1. Open.



2. Remove.



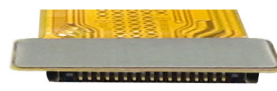
14

CAUTION

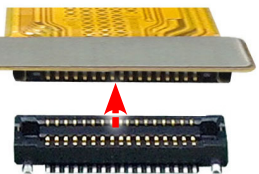
Use extra care when removing the FPCB from the connector.

Fig. C

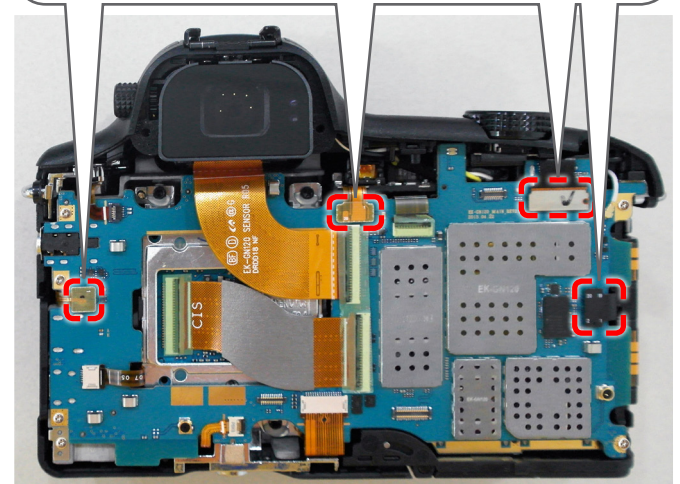
Remove the FPCB



1. It is installed.



2. Remove.



Remove the **FPCB** from the connector as illustrated in **Fig. B**.

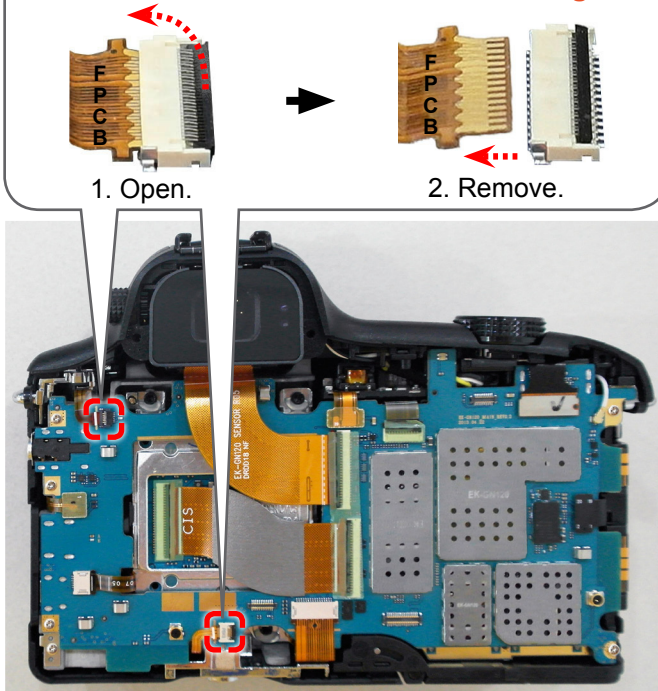
Remove the **FPCB** from the connector as illustrated in **Fig. C**.

14

CAUTION

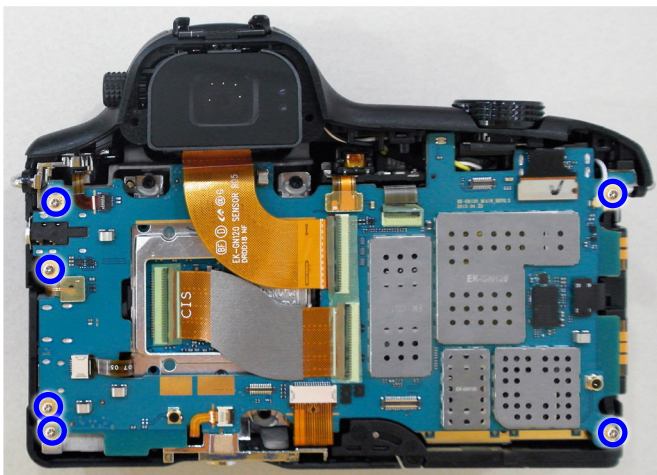
Use extra care when removing the FPCB from the connector.

Remove the FPCB from the connector. **Fig. D**



Remove the **FPCB** from the connector as illustrated in **Fig. D**.

16

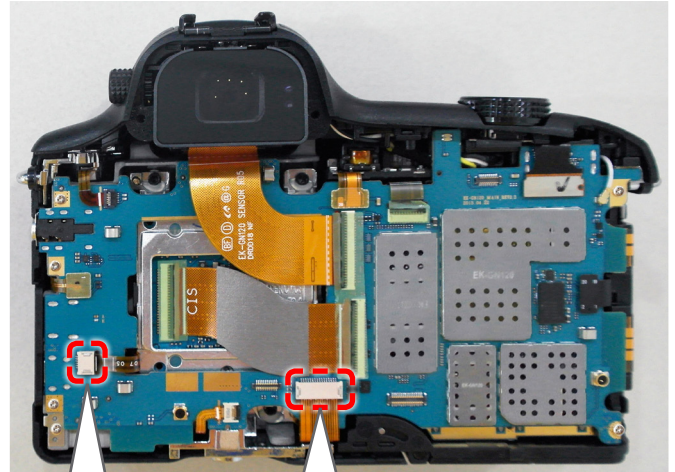


Remove the 6 screws.

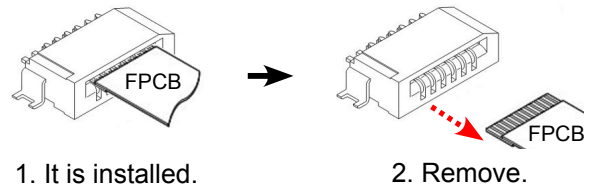
15

CAUTION

Use extra care when removing the FPCB from the connector.

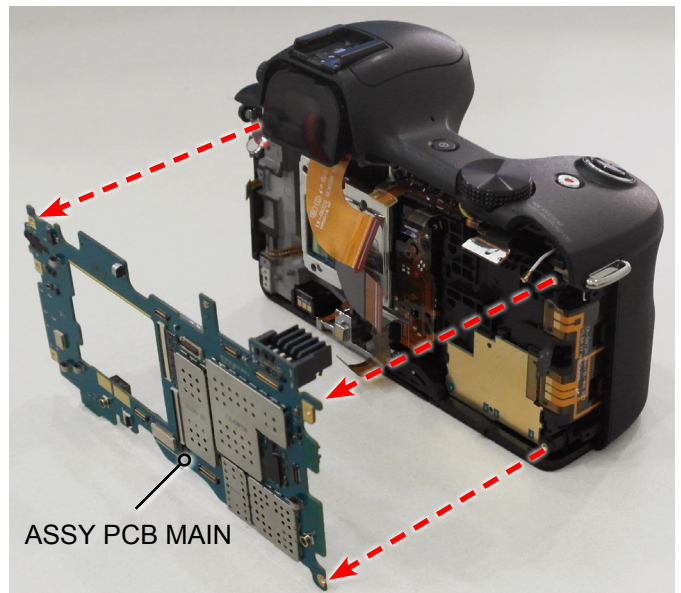


Remove the FPCB

Fig. E

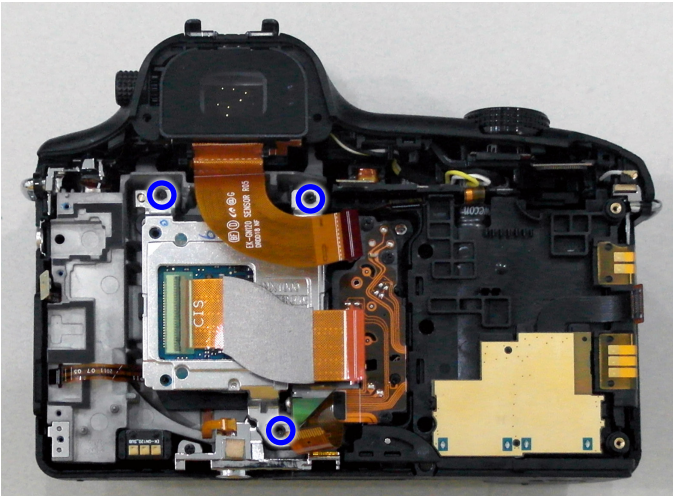
Remove the **FPCB** as illustrated in **Fig. E**.

17



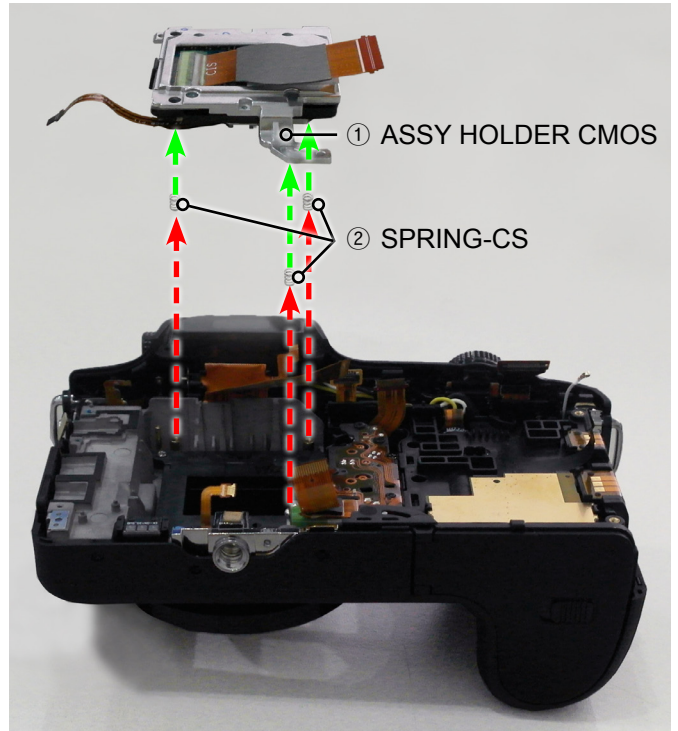
Remove the **ASSY PCB MAIN**.

18



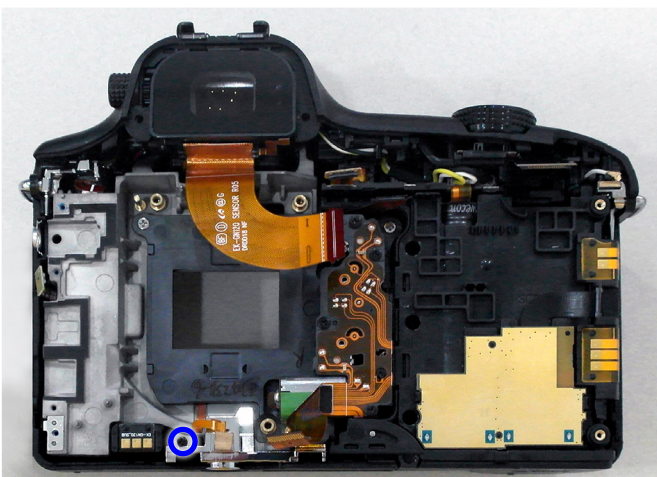
Remove the **6 screws**.

19



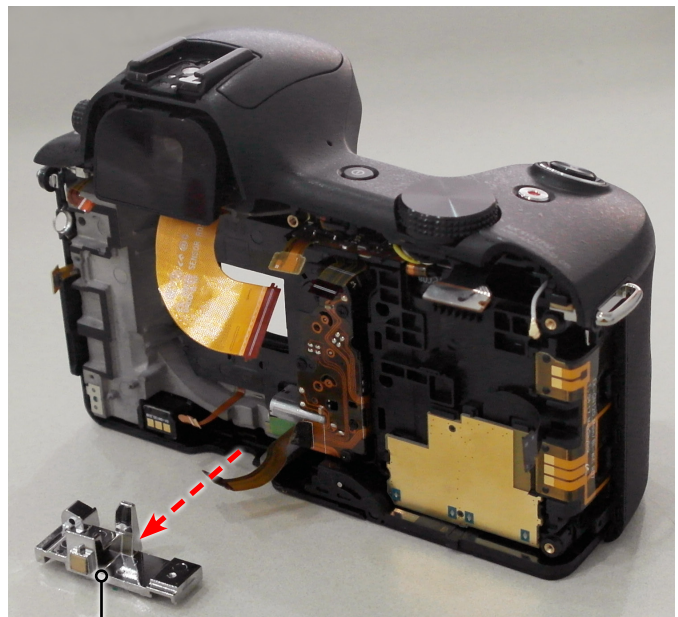
Remove the following parts in the order indicated below.
① **ASSY HOLDER CMOS**
② **SPRING-CS**

20



Remove the **1 screws**.

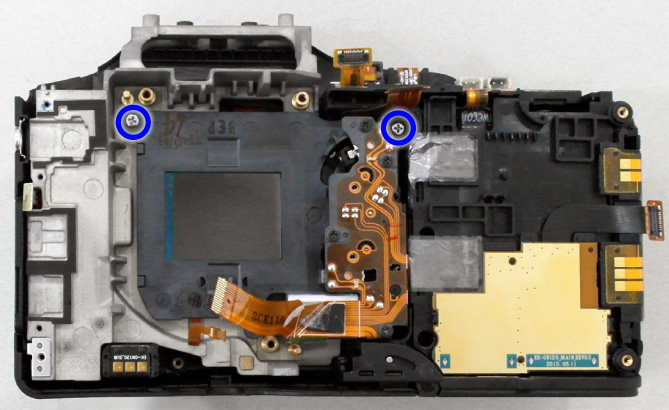
21



HOLDER-TRIPOD

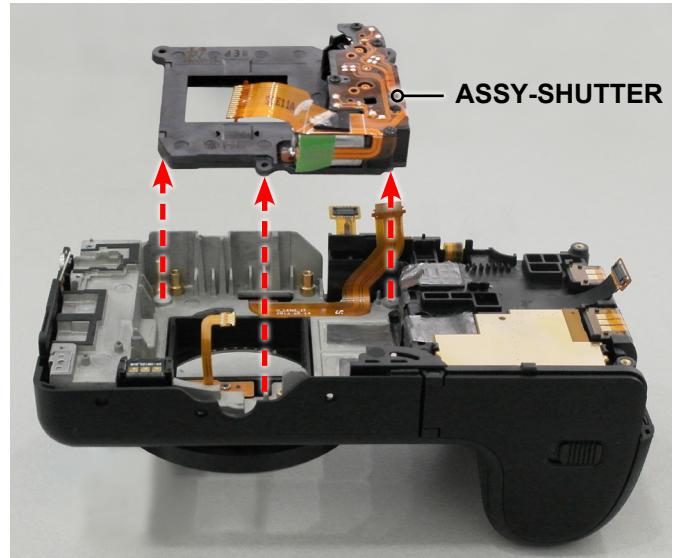
Remove the **HOLDER-TRIPOD**.

22



Remove the 2 screws.

23

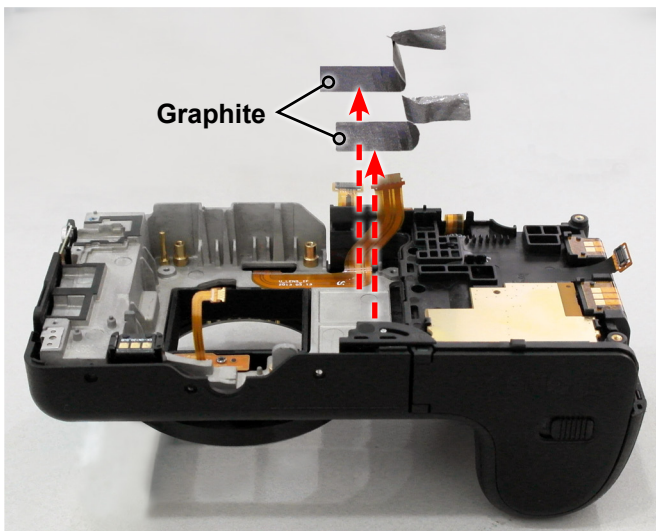


Remove the ASSY-SHUTTER

24

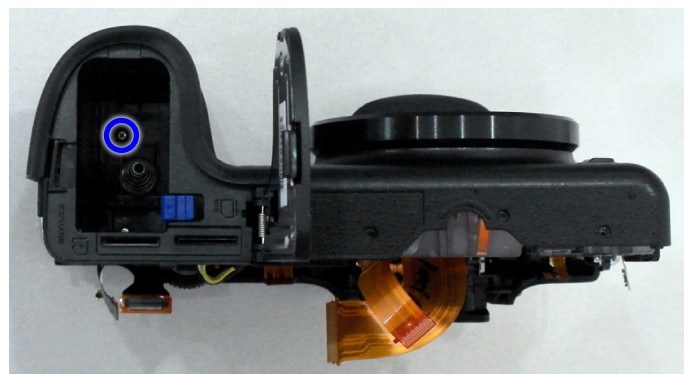


CAUTION
Use extra care when removing the Graphite.



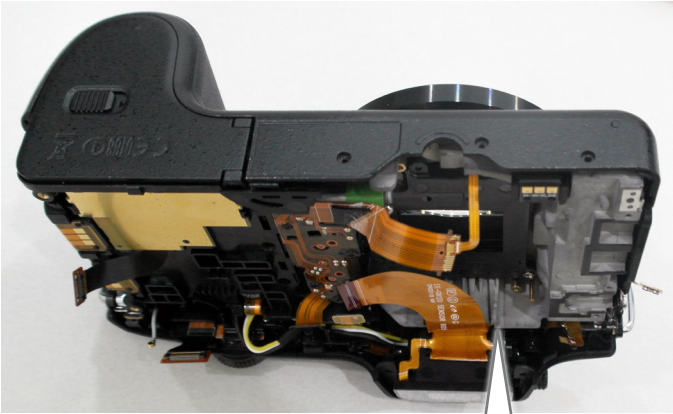
Remove the Graphite .

25



Remove the 1 screws.

26



lock of STROBO

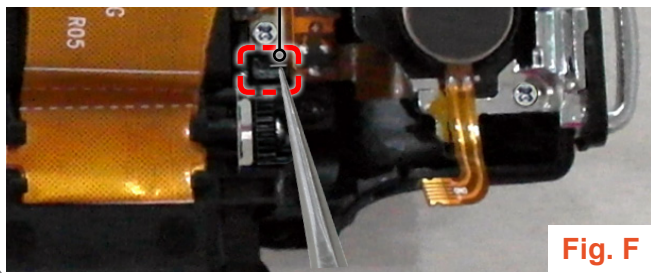


Fig. F

Open the **lock of STROBO** by pressing down as illustrated in **Fig. F** with tweezers.

27



Remove the **4 screws**.

28



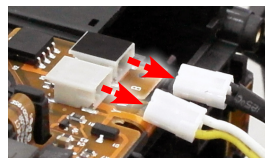
CAUTION
Use extra care when removing the connector.

Remove the **connector**

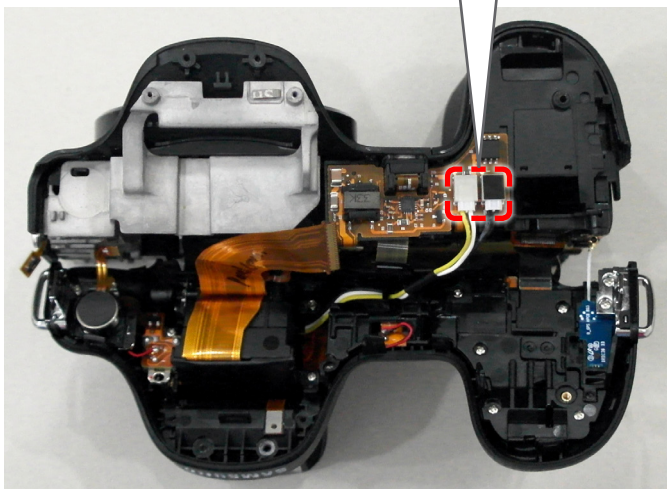
Fig. G



1. It is installed.



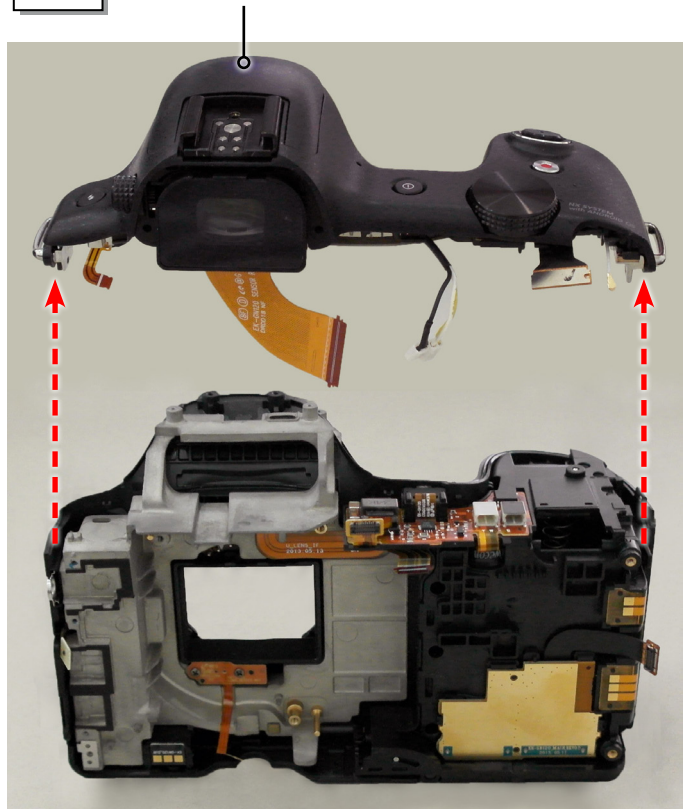
2. Remove.



Remove the **connector** as illustrated in **Fig. G**.

29

ASSY COVER TOP



Remove the **ASSY COVER TOP**.

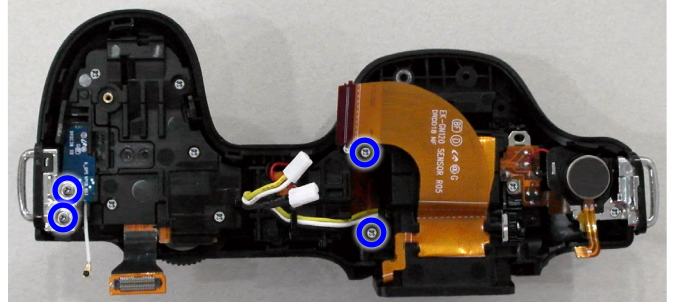
30



ASSY COVER TOP



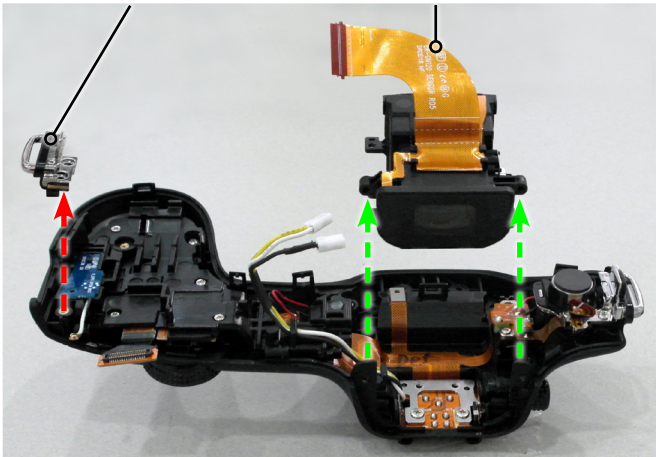
31

Remove the **PLATE-SPRING SHOE** as illustrated in **Fig. H**.Remove the **4 screws**.

32

① HOLDER STRAP

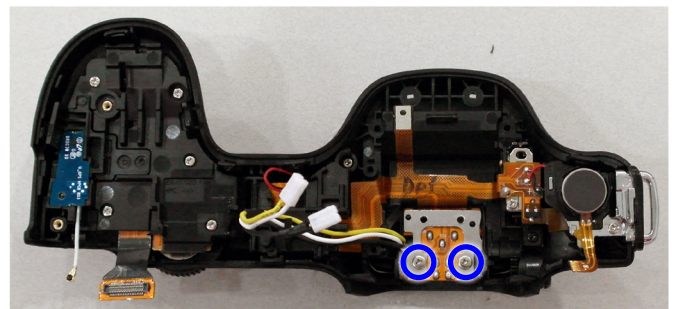
② ASSY FINDER



Remove the following parts in the order indicated below.

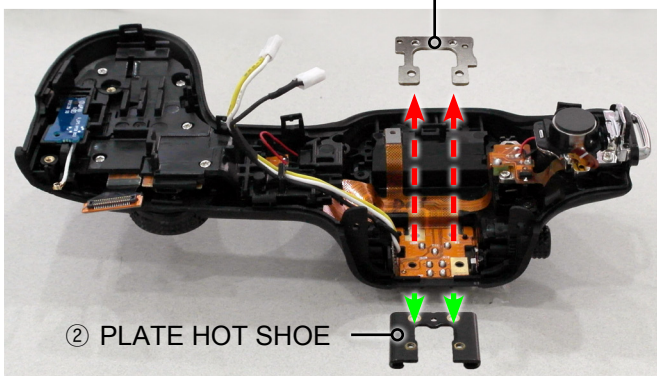
- ① **HOLDER STRAP**
- ② **ASSY FINDER**

33

Remove the **2 screws**.

34

① PLATE-HOT SHOE BOTTOM



Remove the following parts in the order indicated below.

- ① **PLATE-HOT SHOE BOTTOM**
- ② **PLATE HOT SHOE**

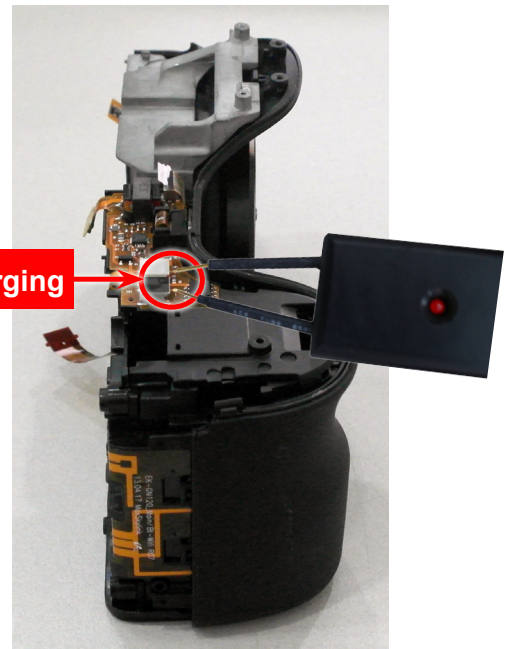
35



CAUTION

Discharge the condenser.

Discharging



Discharge the part marked in red circle.

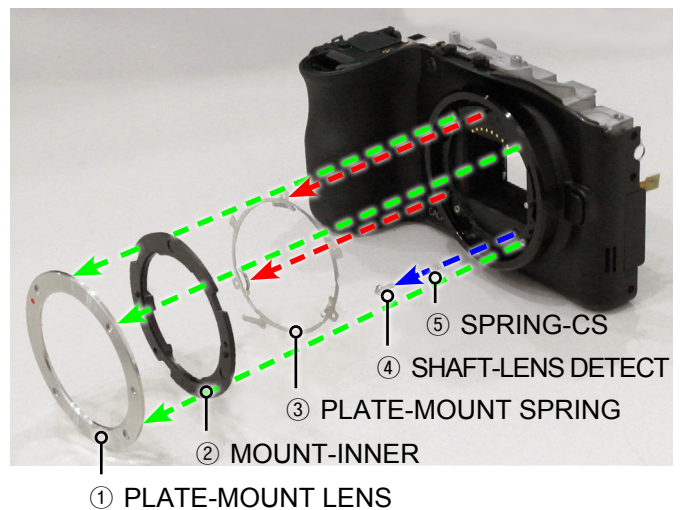
7-1-2. Technical expertise support - Disassembly

1



Remove the 4 screws.

2



Remove the following parts in the order indicated below.

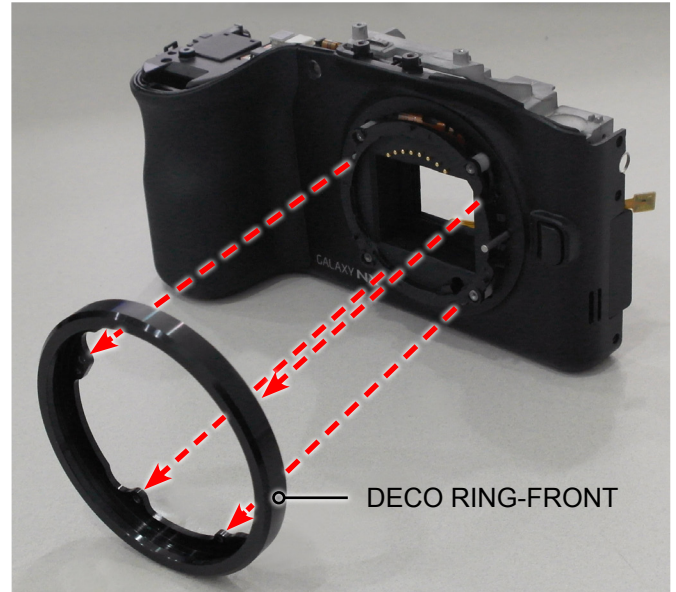
- ① **PLATE-MOUNT LENS**
- ② **MOUNT-INNER**
- ③ **PLATE-MOUNT SPRING**
- ④ **SHAFT-LENS DETECT**
- ⑤ **SPRING-CS**

3



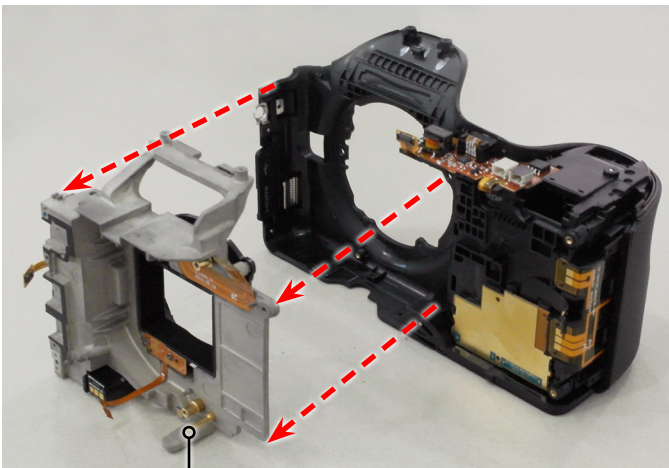
Remove the **3 screws**.

4



Remove the **DECO RING-FRONT**.

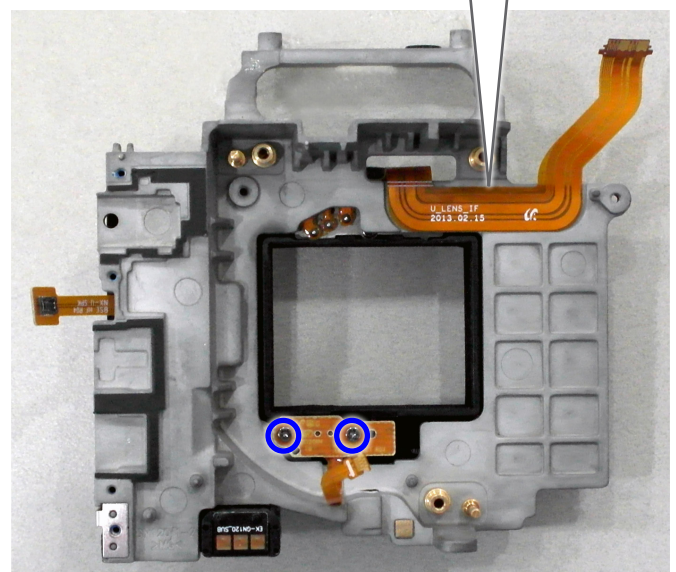
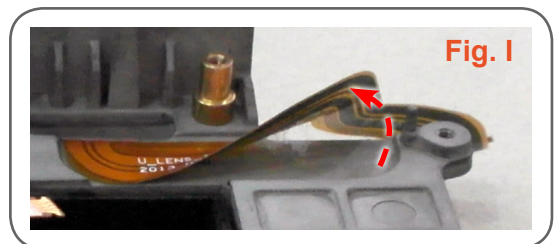
5



ASSY HOLDER INNER MOUN

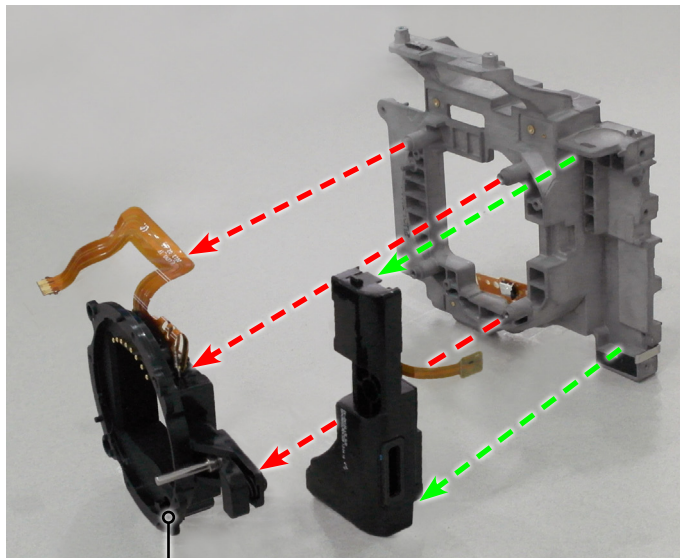
Remove the **ASSY HOLDER INNER MOUN**

6



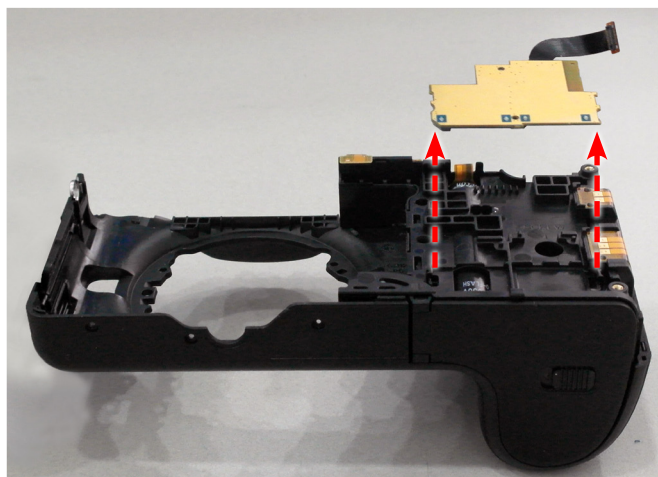
1. Remove the **FPCB** that is attached on the ASSY HOLER MOUNT as illustrated in **Fig. 1**.
2. Remove the **2 screws**.

7



① ASSY HOLDER
INNER MOUNT

8

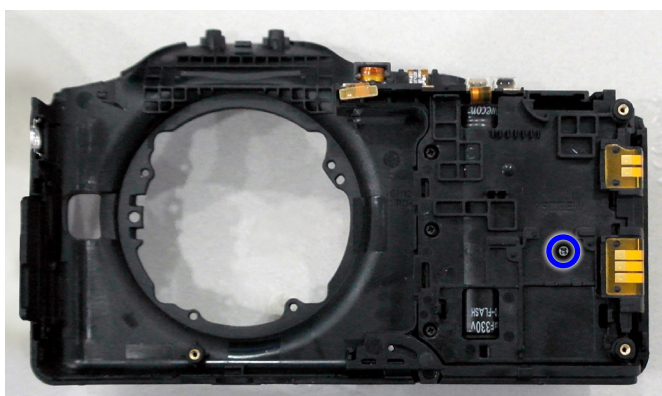


Remove the following parts in the order indicated below.

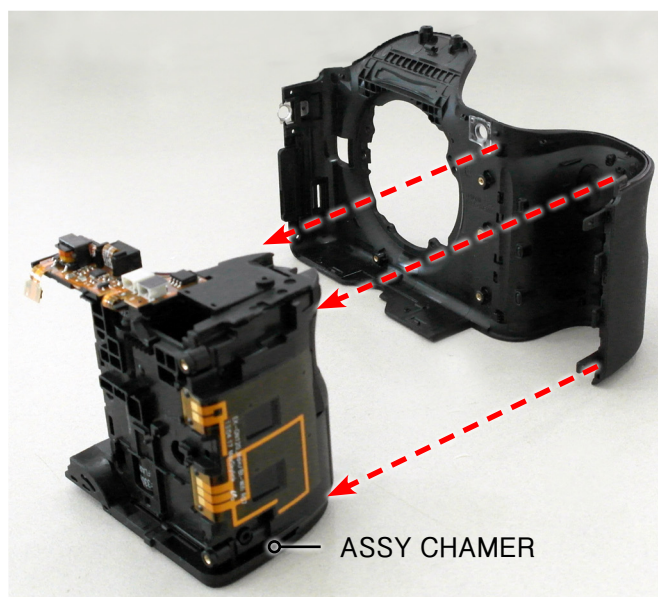
① ASSY HOLDER INNER MOUNT

Remove the

9



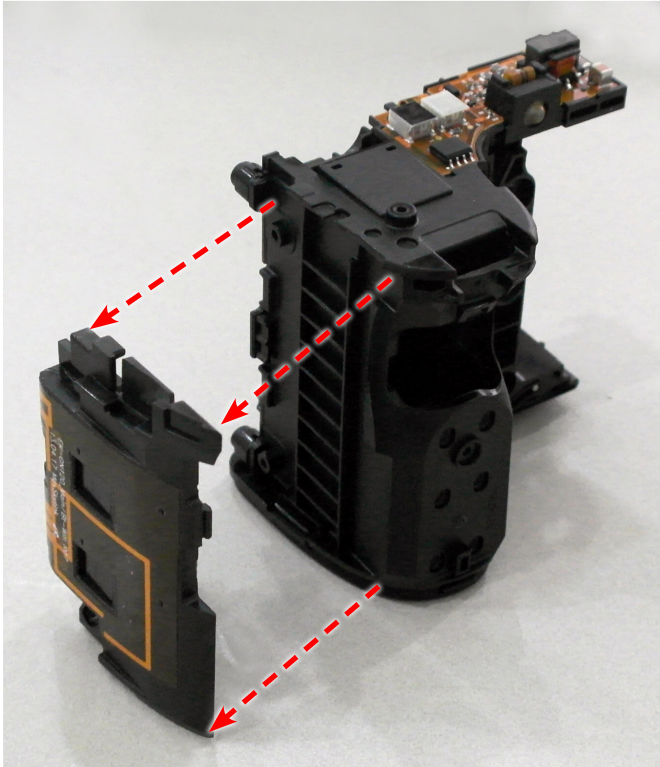
10



Remove the **1 screws**.

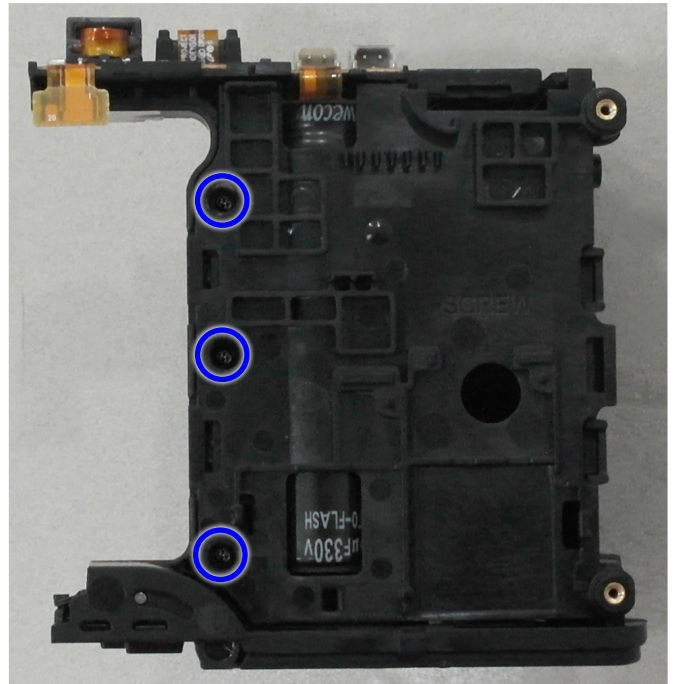
Remove the **ASSY CHAMER**.

11



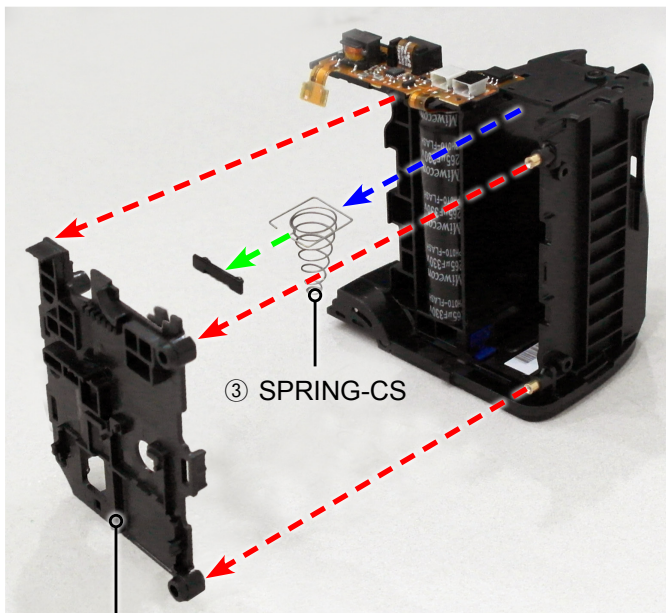
Remove the

12



Remove the **3 screws**.

13



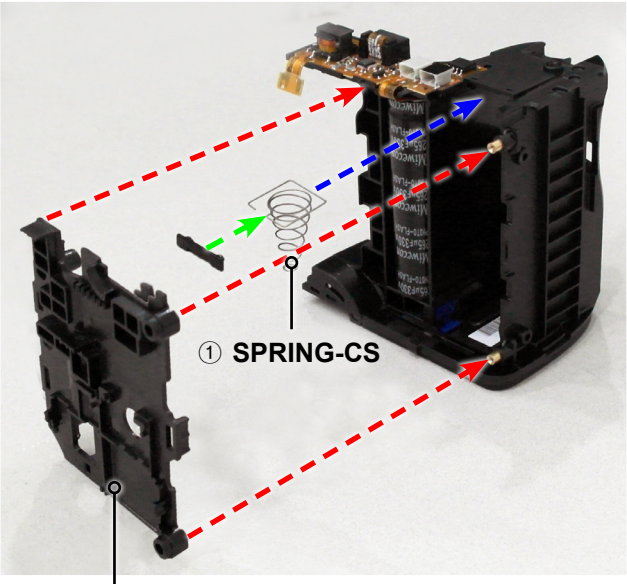
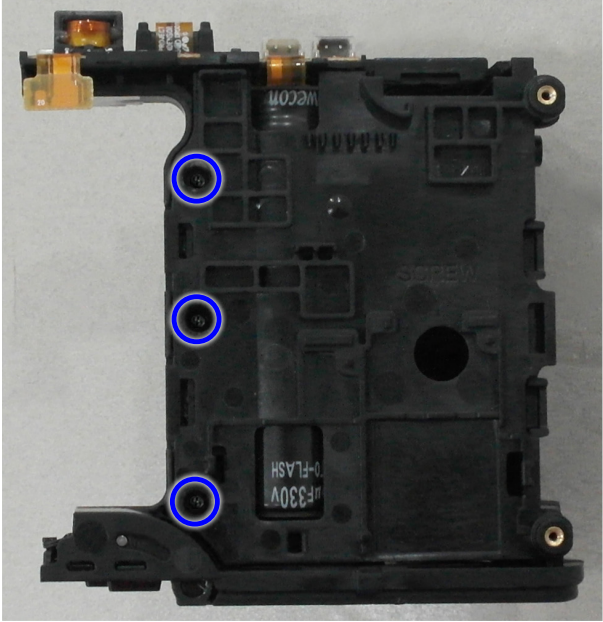
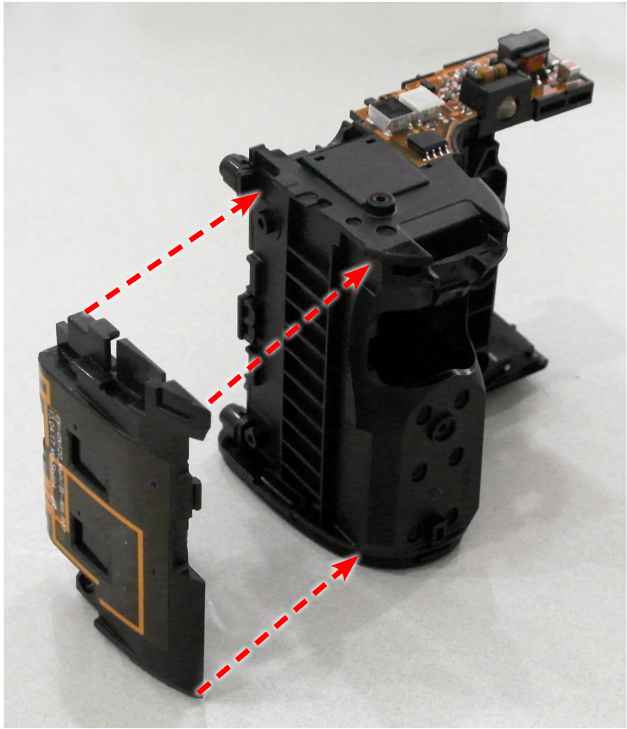
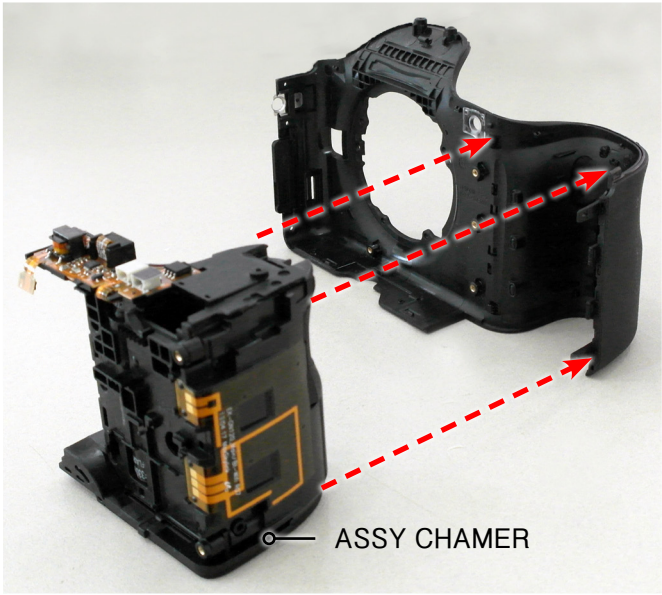
① PLATE BATTERY CHAMBER

Remove the following parts in the order indicated below.

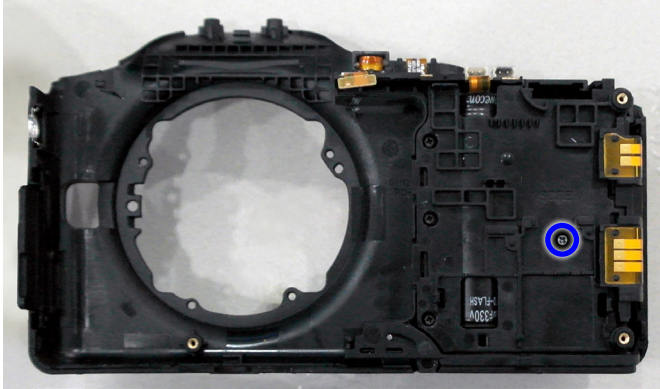
- ① **PLATE BATTERY CHAMBER**
- ②
- ③ **SPRING-CS**

7-2. Reassembly

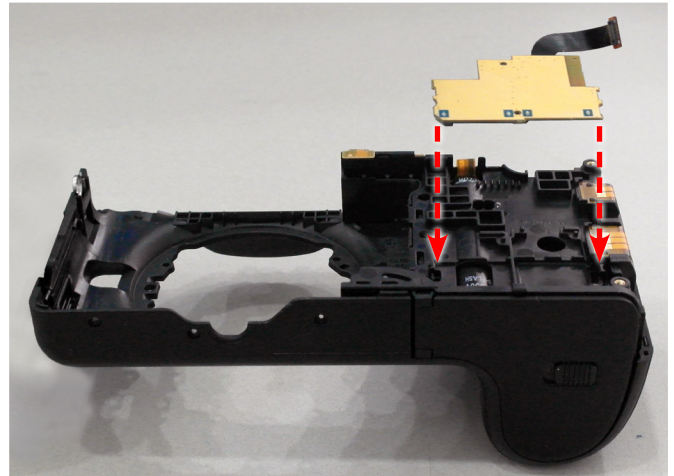
7-2-1. Technical expertise support - Reassembly

1  ③ PLATE BATTERY CHAMBER Install the following parts in the order indicated below. ① SPRING-CS ② ③ PLATE BATTERY CHAMBER	2  Tighten the 3 screws.
3  Install the	4  Install the ASSY CHAMER.

5



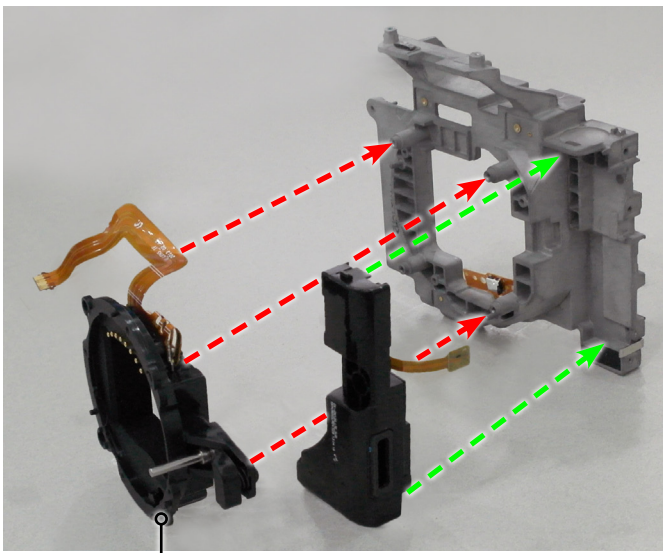
6



Tighten the **1 screws**.

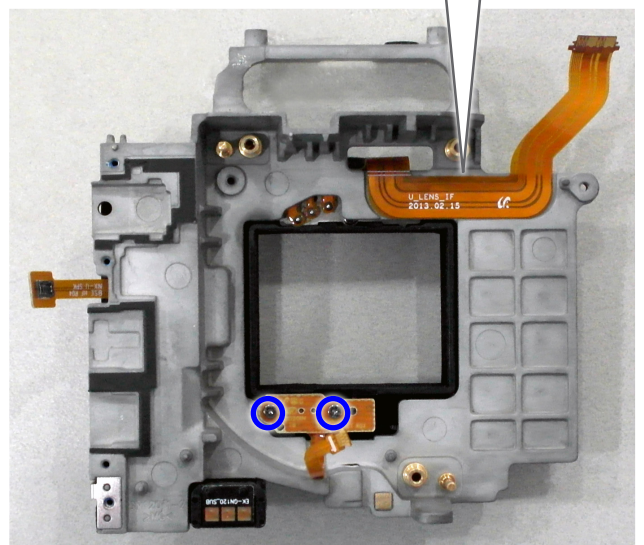
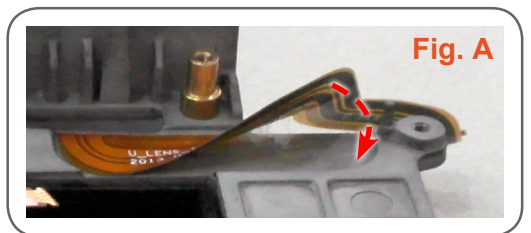
Install the

7



② ASSY HOLDER
INNER MOUNT

8

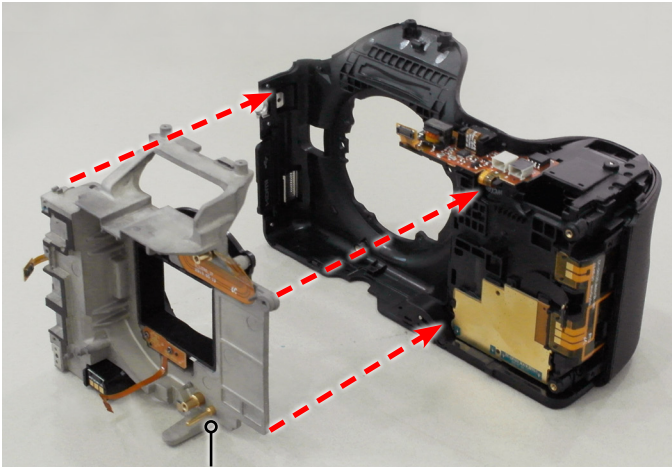


Install the following parts in the order indicated below.

- ①
- ② ASSY HOLDER INNER MOUNT

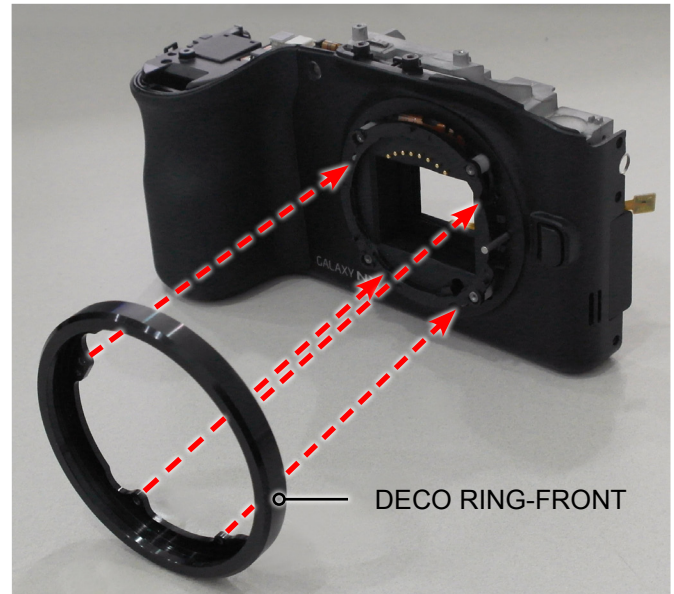
1. Tighten the **2 screws**.
2. Attach the **FPCB** on the ASSY HOLER MOUNT as illustrated in **Fig. A**.

9



ASSY HOLDER INNER MOUN

10



DECO RING-FRONT

Install the **ASSY HOLDER INNER MOUN**

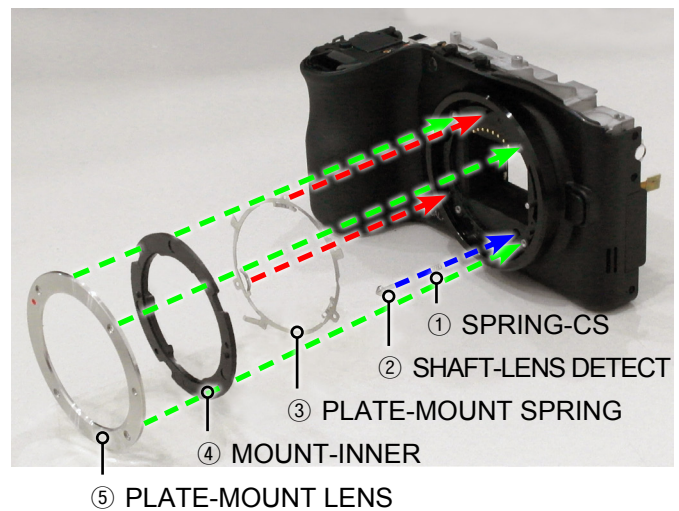
Install the **DECO RING-FRONT**.

11



Tighten the **ASSY COVER TOP**.

12



Install the following parts in the order indicated below.

- ① **SPRING-CS**
- ② **SHAFT-LENS DETECT**
- ③ **PLATE-MOUNT SPRING**
- ④ **MOUNT-INNER**
- ⑤ **PLATE-MOUNT LENS**

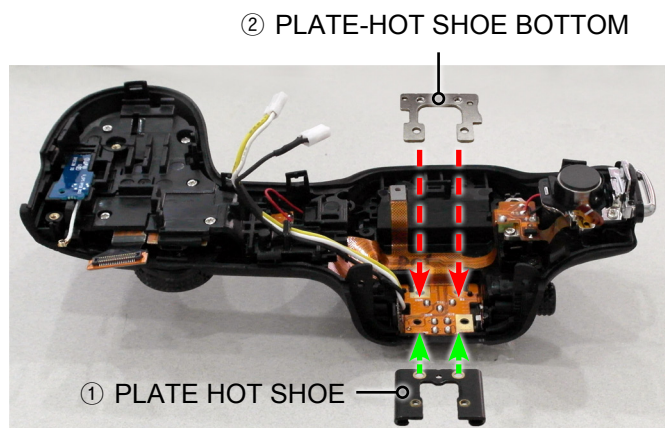
13



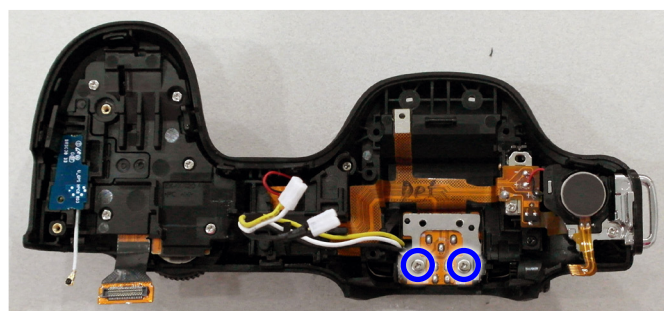
Tighten the **4 screws**.

7-2-2. General support - Reassembly

1



2



Install the following parts in the order indicated below.

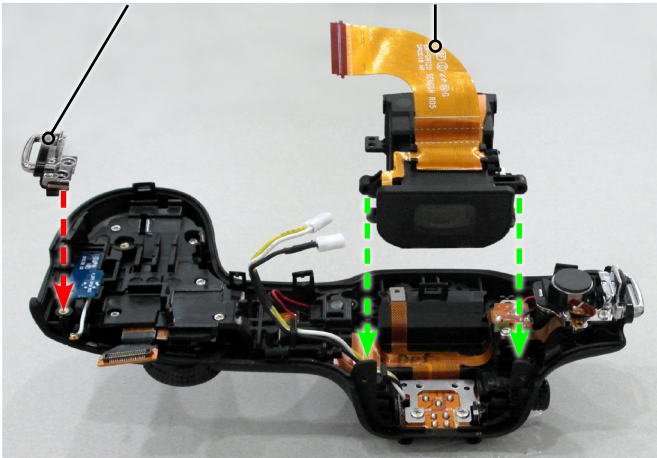
- ① **PLATE HOT SHOE**
- ② **PLATE-HOT SHOE BOTTOM**

Tighten the **2 screws**.

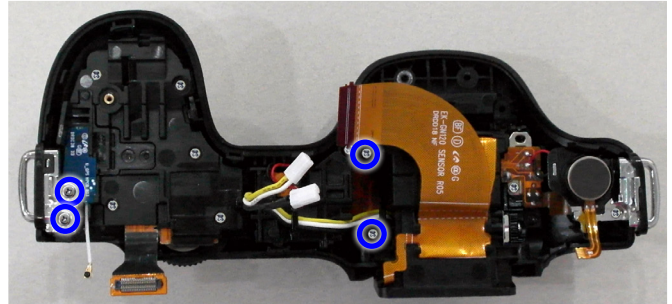
3

② HOLDER STRAP

① ASSY FINDER



4



Install the following parts in the order indicated below.

- ① ASSY FINDER
- ② HOLDER STRAP

Tighten the 4 screws.

5

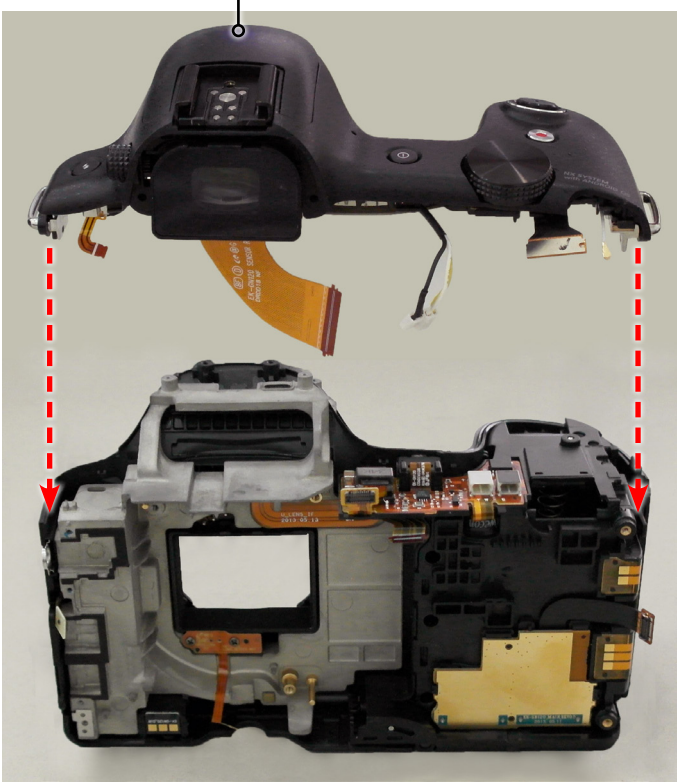


PLATE-SPRING SHOE

Fig. B

6

ASSY COVER TOP



Install the **PLATE-SPRING SHOE** as illustrated in **Fig. B**.

Install the **ASSY COVER TOP**.

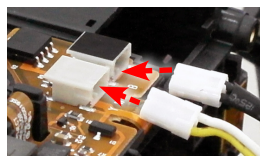
7



CAUTION
Use extra care when install the connector.

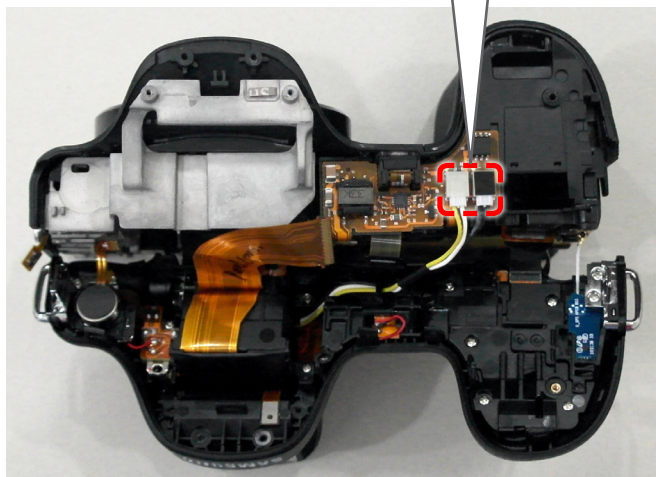
Install the **connector**

Fig. C



1. Connect.

2. Close.



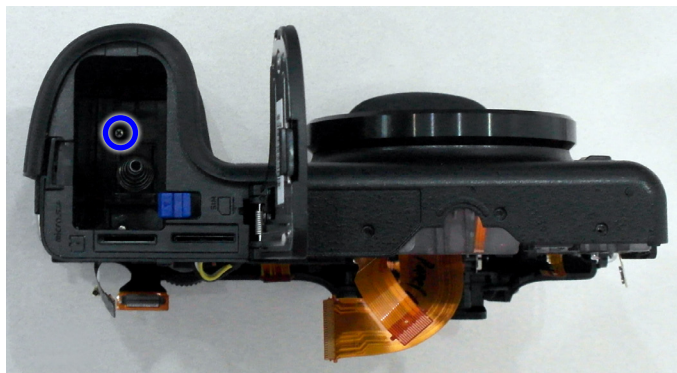
8



Install the **connector** as illustrated in **Fig. C**.

Tighten the **4 screws**.

9



Tighten the **1 screws**.

10

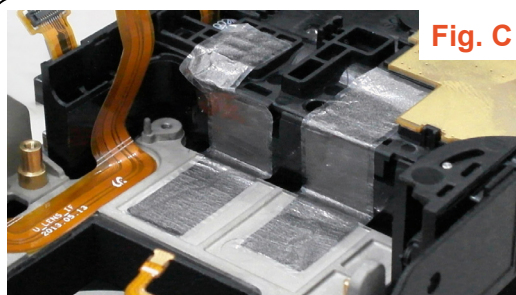
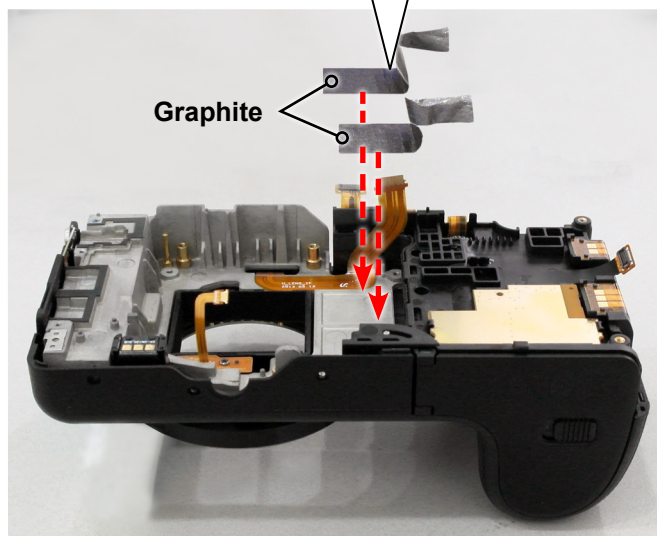


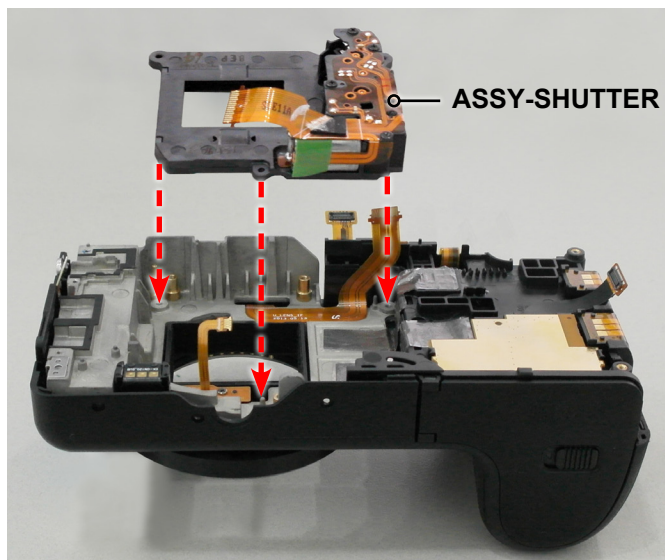
Fig. C

Graphite



Install the **Graphite** as illustrated in **Fig. D**.

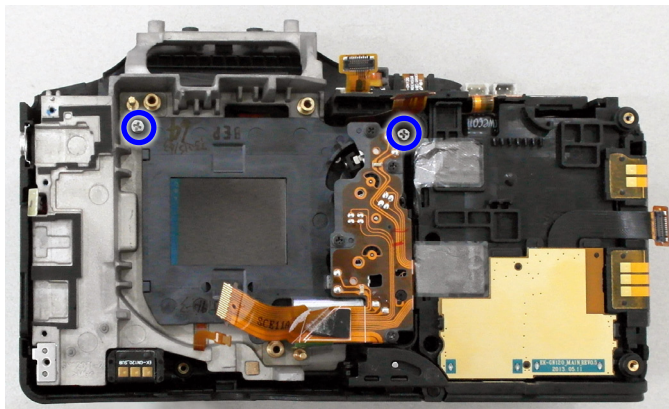
11



ASSY-SHUTTER

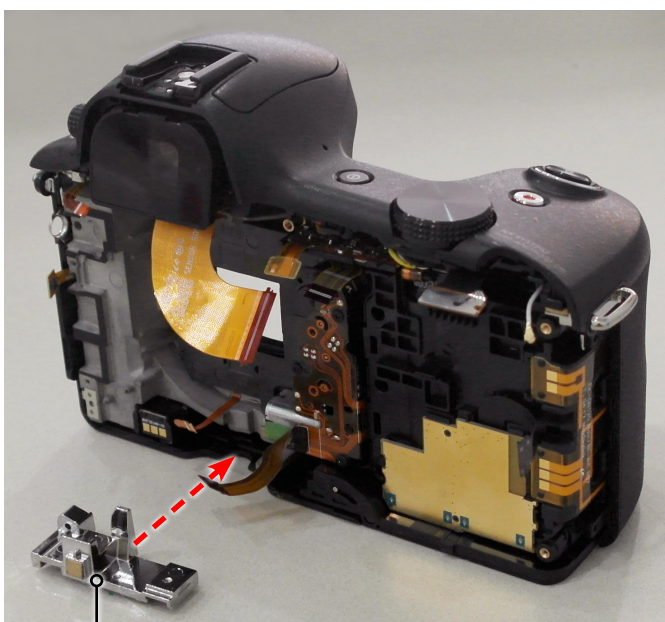
Install the **ASSY-SHUTTER**

12



Tighten the **2 screws**.

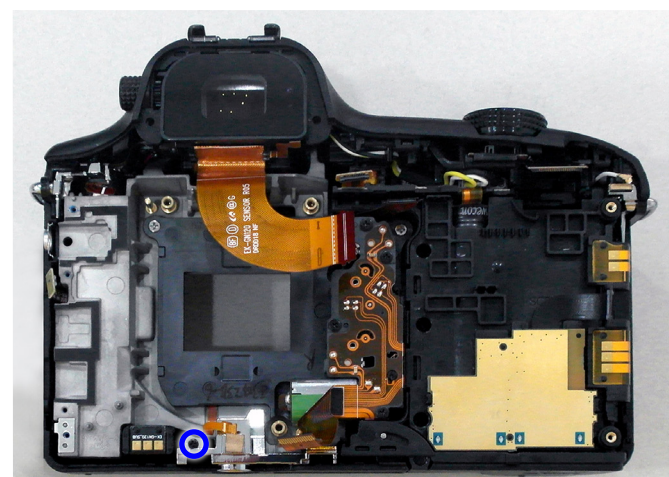
13



HOLDER-TRIPOD

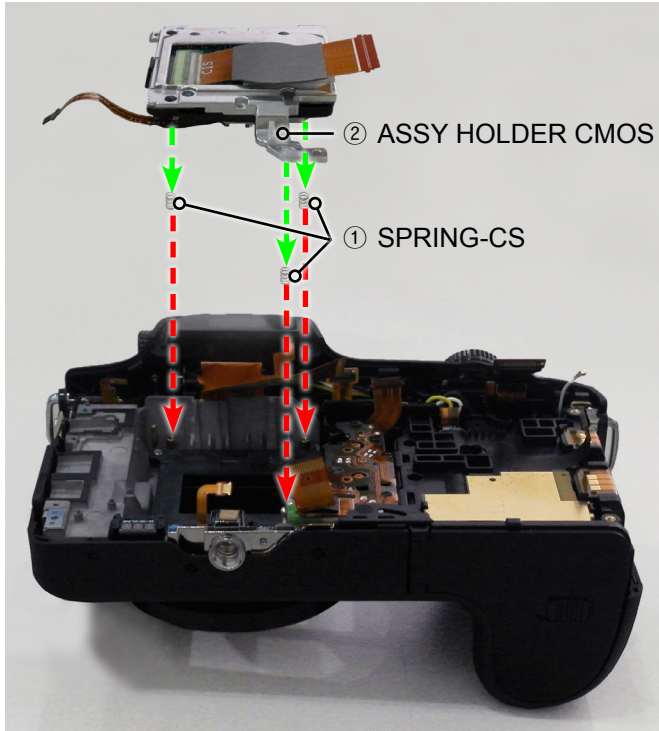
Install the **HOLDER-TRIPOD**.

14



Tighten the **1 screws**.

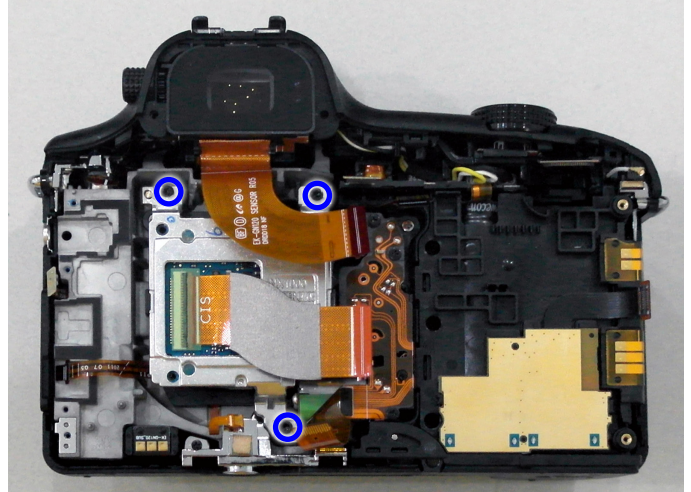
15



Install the following parts in the order indicated below.

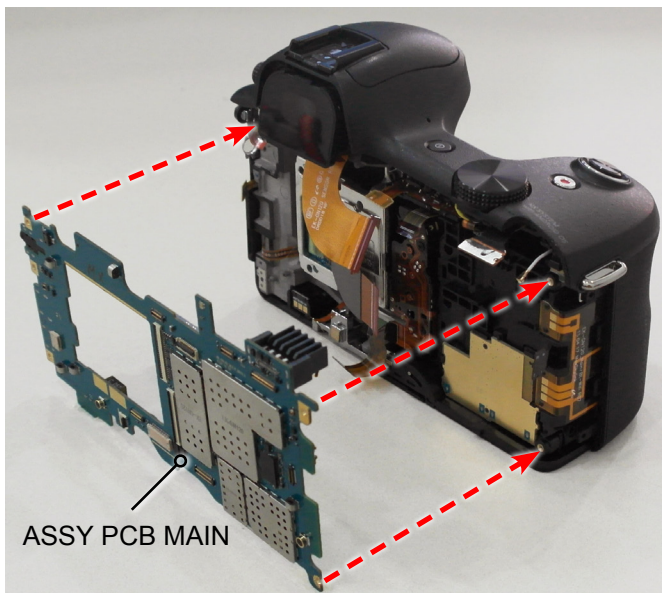
- ① **ASSY HOLDER CMOS**
- ② **SPRING-CS**

16



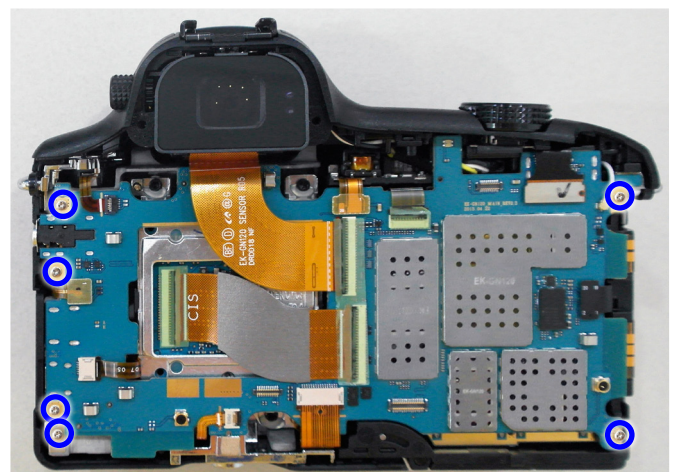
Tighten the **3 screws**.

17



Install the **ASSY PCB MAIN**.

18

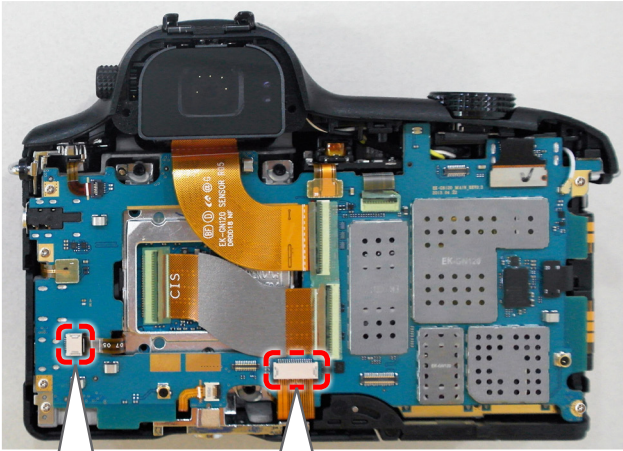


Tighten the **6 screws**.

19

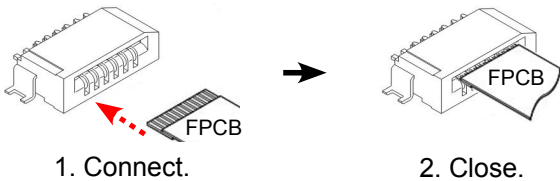
CAUTION

Insert the FPCB into the connector making sure that it goes into its appropriate position and the silk line is straight and level. Extend it all the way to the end of the connector.



Install the FPCB

Fig. E



1. Connect.

2. Close.

Install the **FPCB** as illustrated in **Fig. E**.

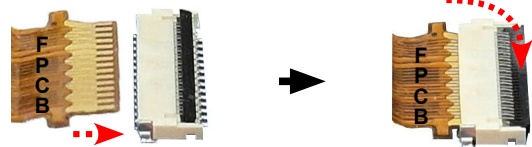
20

CAUTION

Insert the FPCB into the connector making sure that it goes into its appropriate position and the silk line is straight and level. Extend it all the way to the end of the connector.

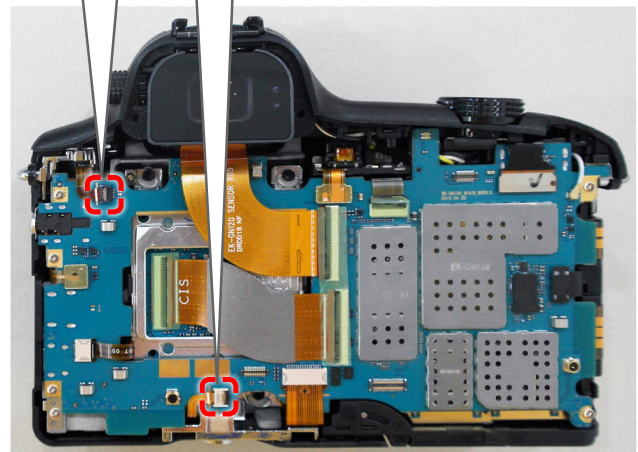
Install the FPCB from the connector.

Fig. F



1. Install.

2. Close.

Install the **FPCB** from the connector as illustrated in **Fig. F**.

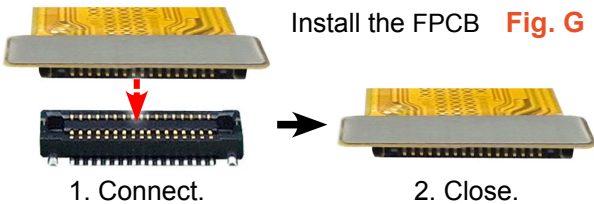
21

CAUTION

Insert the FPCB into the connector making sure that it goes into its appropriate position and the silk line is straight and level. Extend it all the way to the end of the connector.

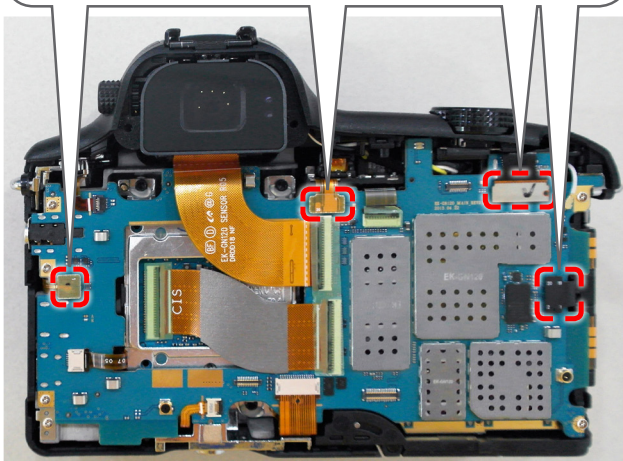
Install the FPCB

Fig. G



1. Connect.

2. Close.

Install the **FPCB** from the connector as illustrated in **Fig. G**.

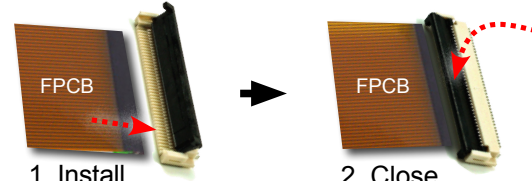
22

CAUTION

Insert the FPCB into the connector making sure that it goes into its appropriate position and the silk line is straight and level. Extend it all the way to the end of the connector.

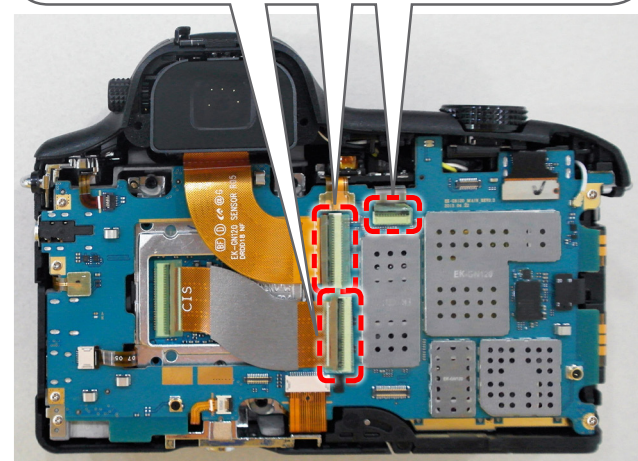
Install the FPCB from the connector.

Fig. H



1. Install.

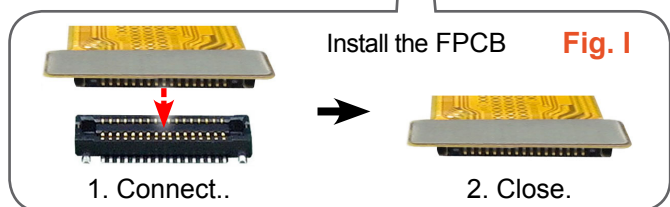
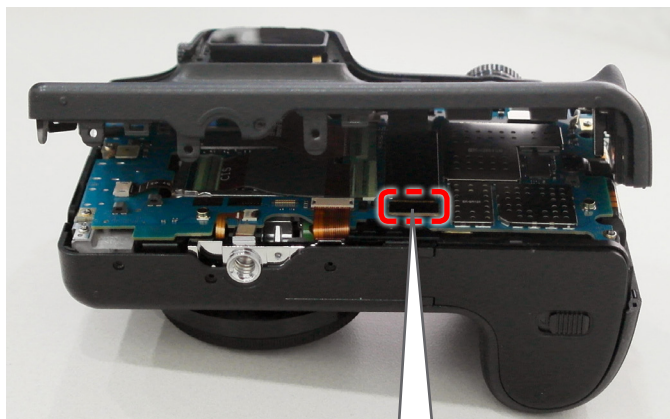
2. Close.

Install the **FPCB** from the connector as illustrated in **Fig. H**.

23

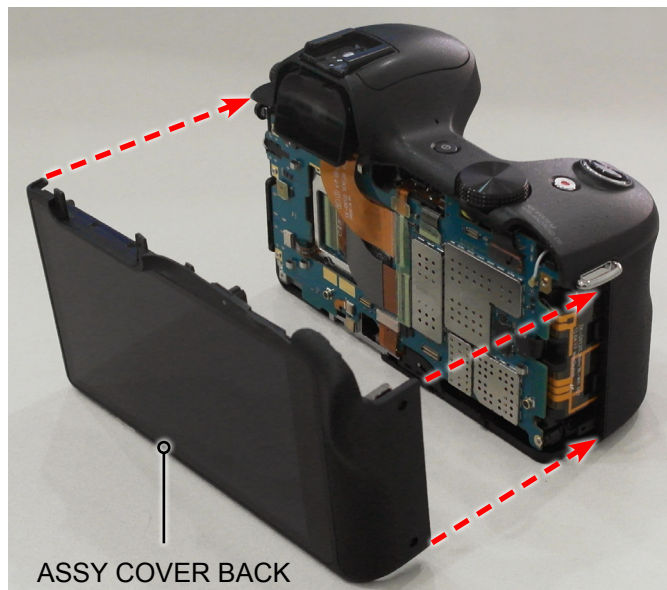
**CAUTION**

Insert the FPCB into the connector making sure that it goes into its appropriate position and the silk line is straight and level. Extend it all the way to the end of the connector.



Install the **FPCB** from the connector as illustrated in **Fig. I**.

24



Install the **ASSY COVER BACK**.

25



Install the **3 screws** on the left side, **2 screws** on the right side and **4 screws** on the bottom side.

26



Install the **3 SCREW CAP** on the left side, **2 SCREW CAP** on the right side and **4 SCREW CAP** on the bottom side.

27



28



Install the **ASSY HOLDER EP CAP**

Install the **RUBBER EP CAP**

29



30

HOTSHOE CAP

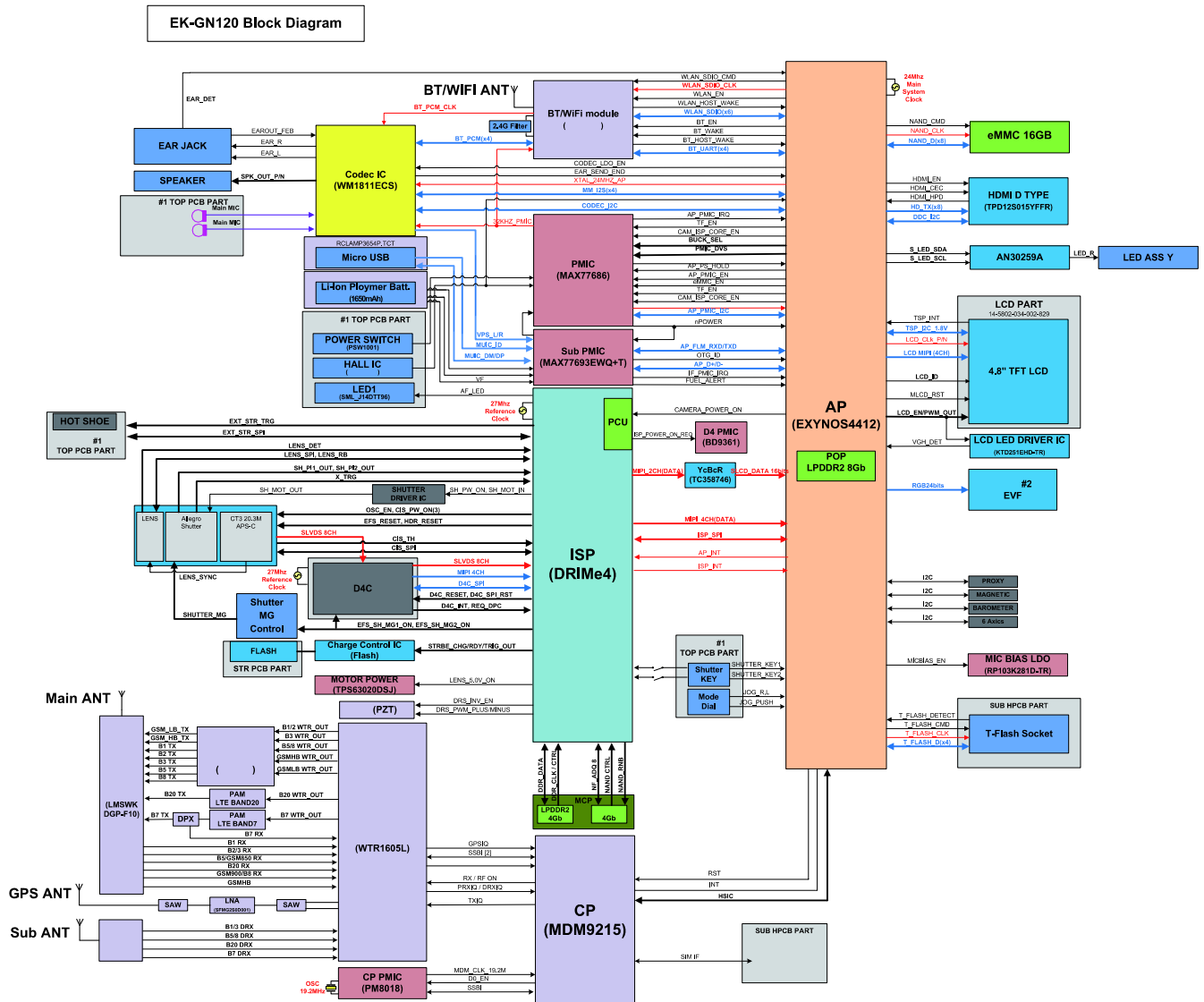


Install the **RUBBER EP CAP**.

Install the **HOTSHOE CAP**

8. Level 3 Repair

8-1. Block diagram

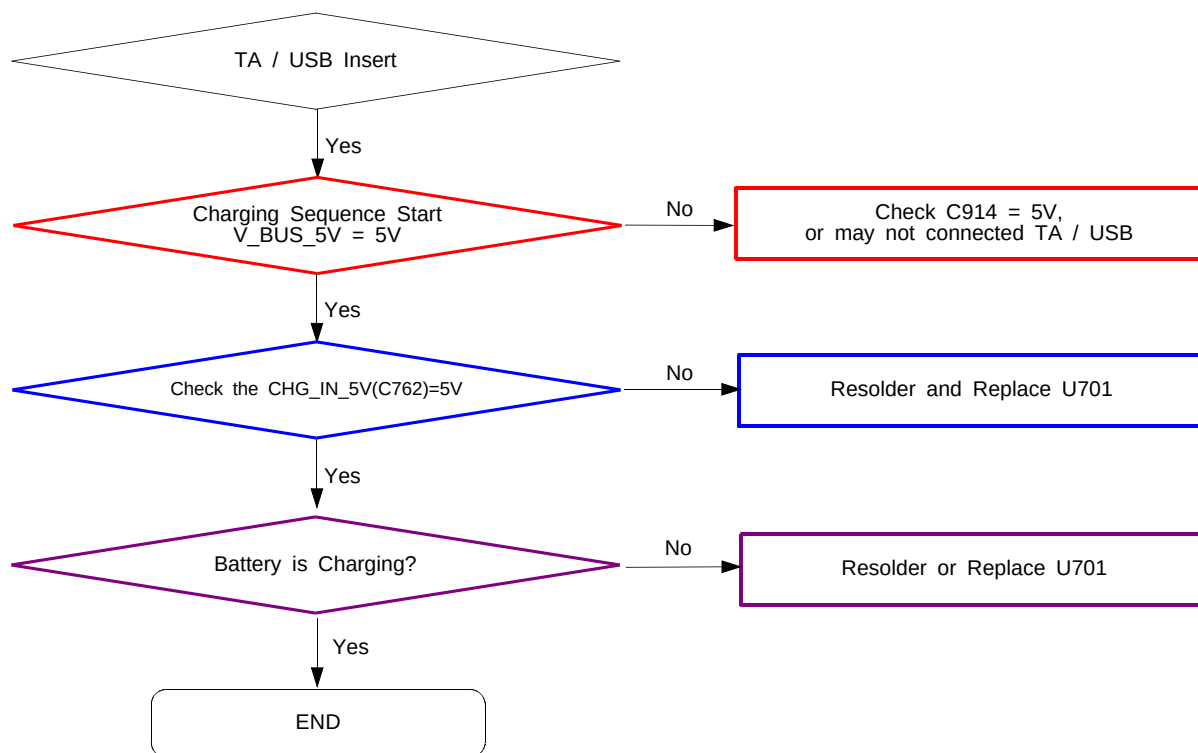


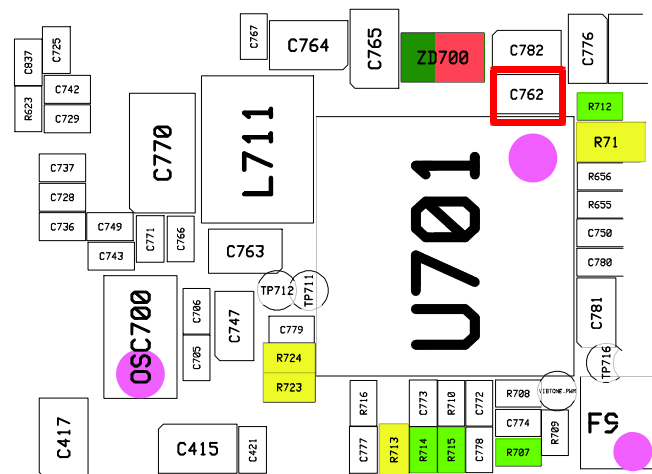
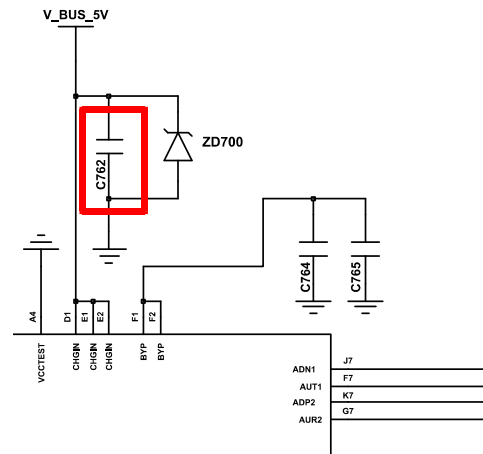
8-3-2. Power On



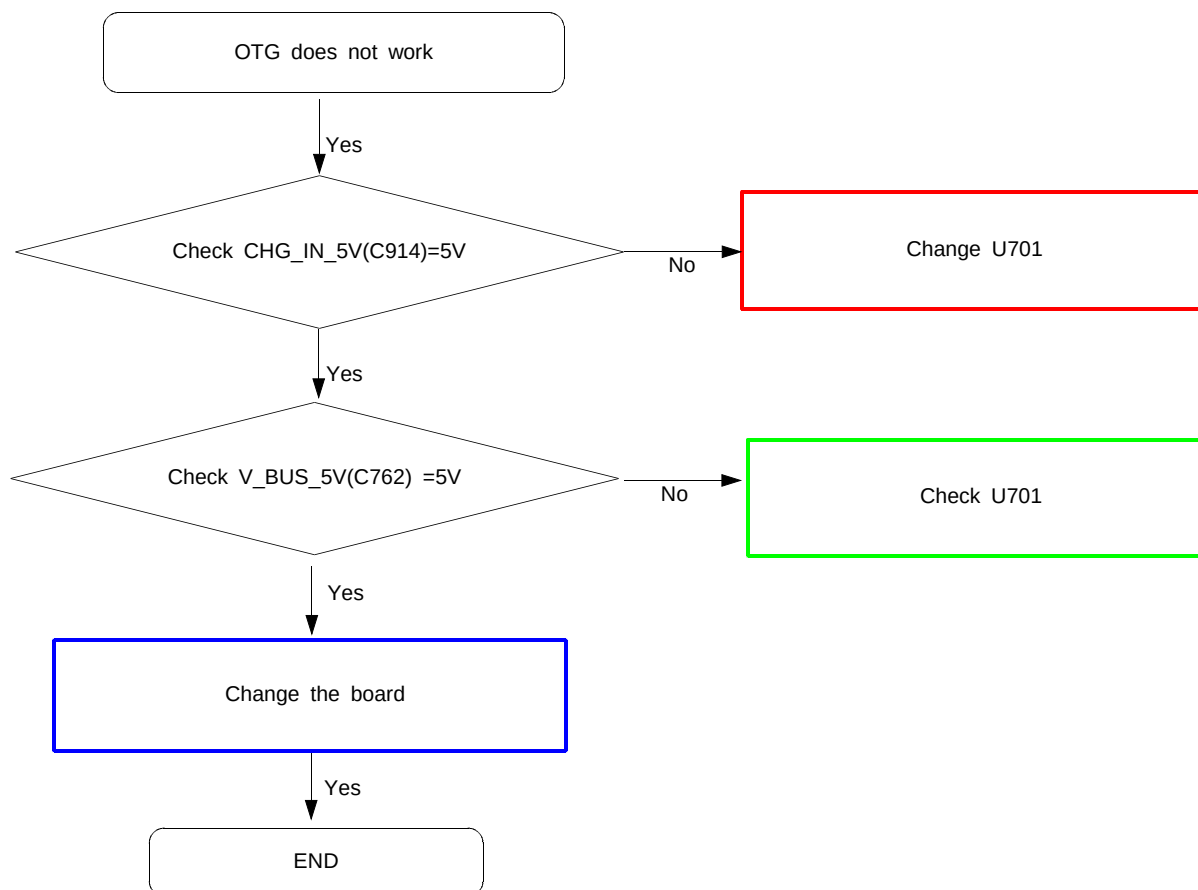


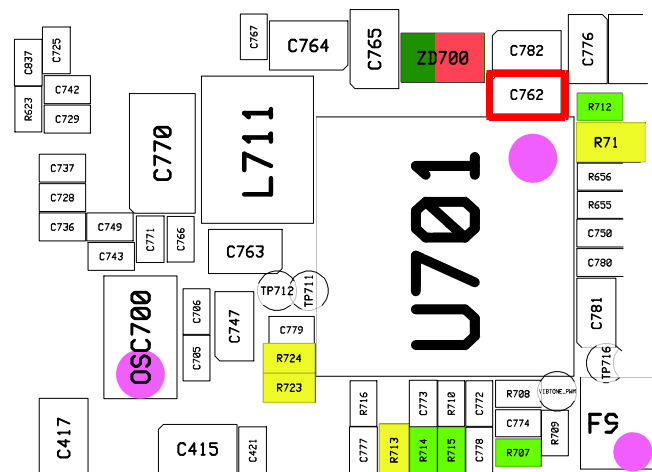
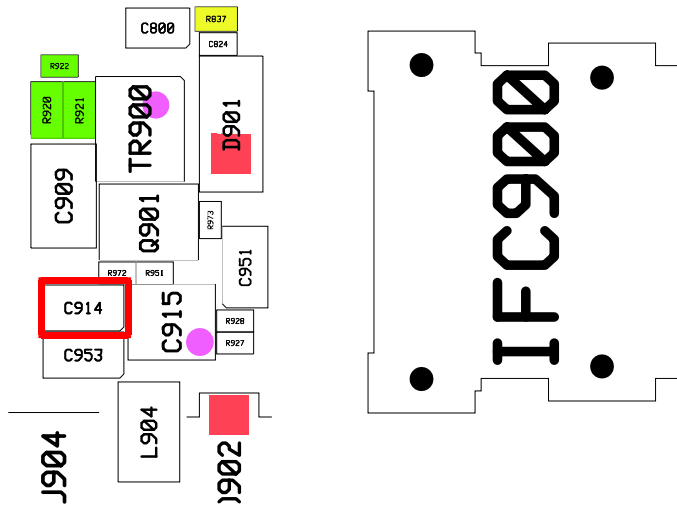
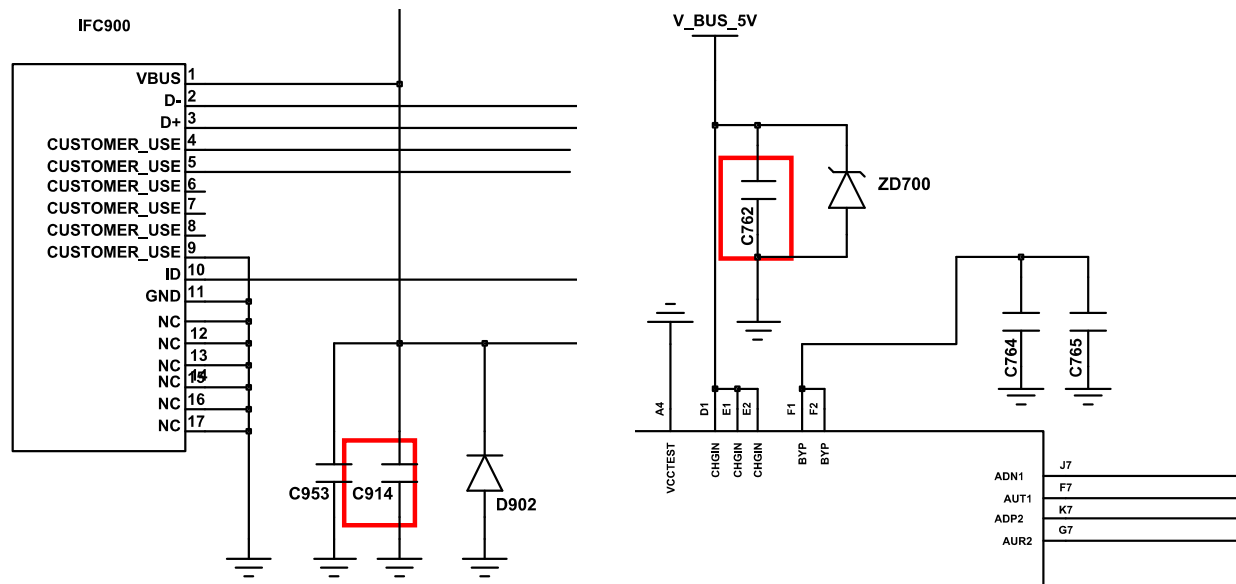
8-3-3. Charging Part



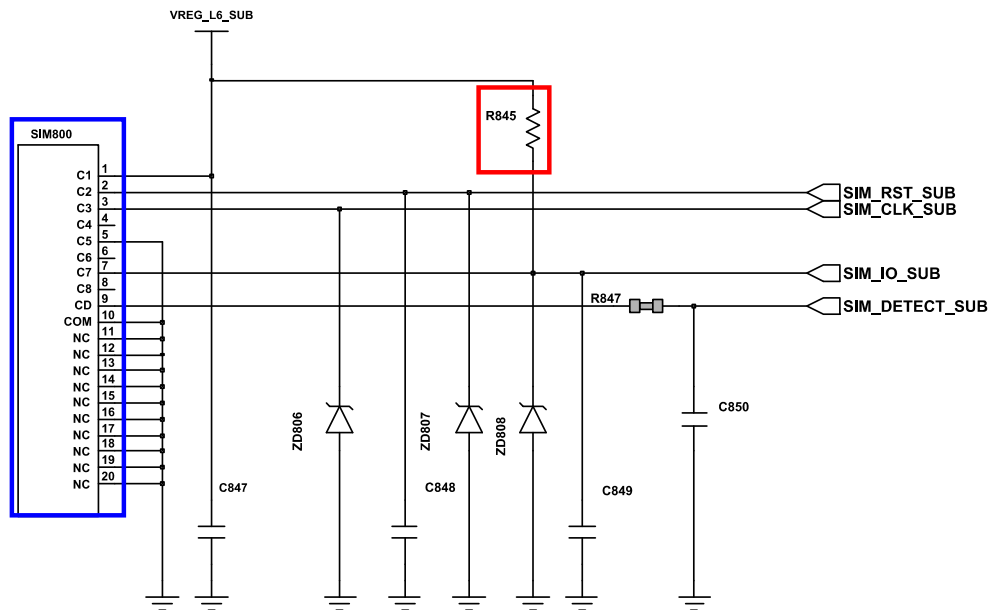
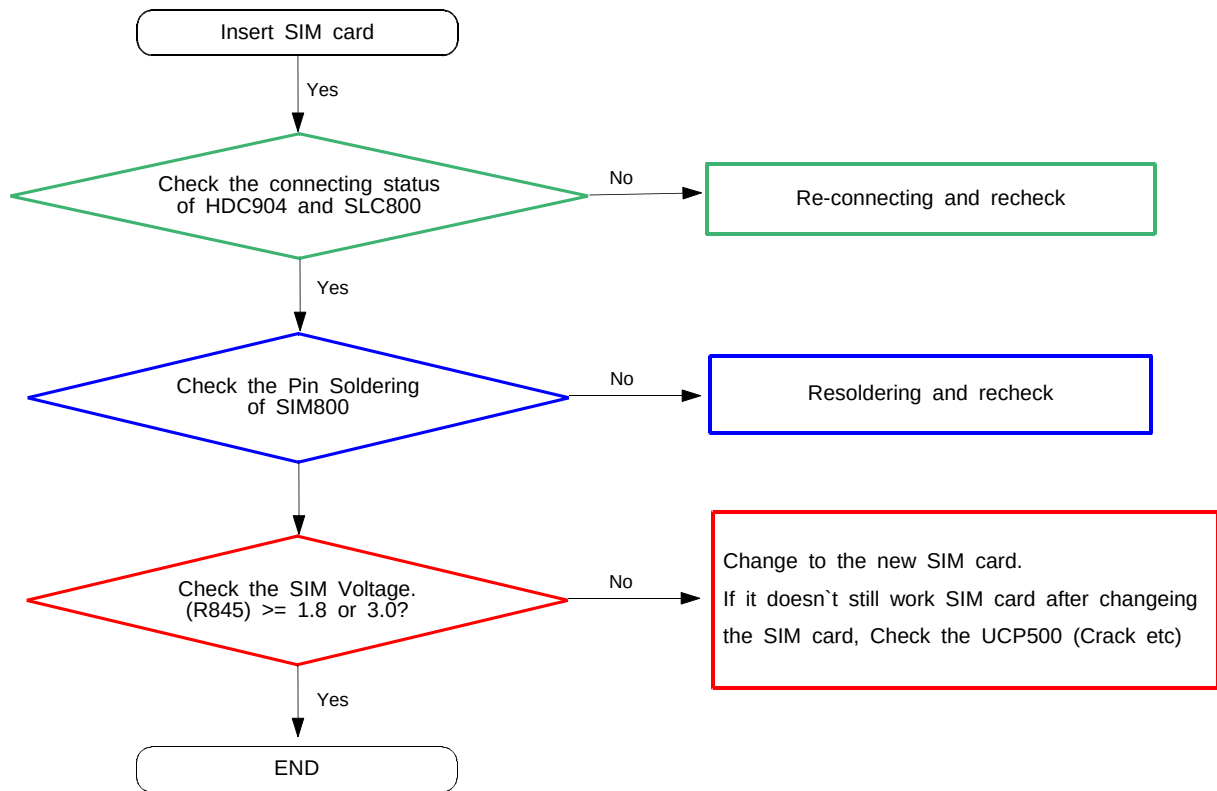


8-3-4. OTG

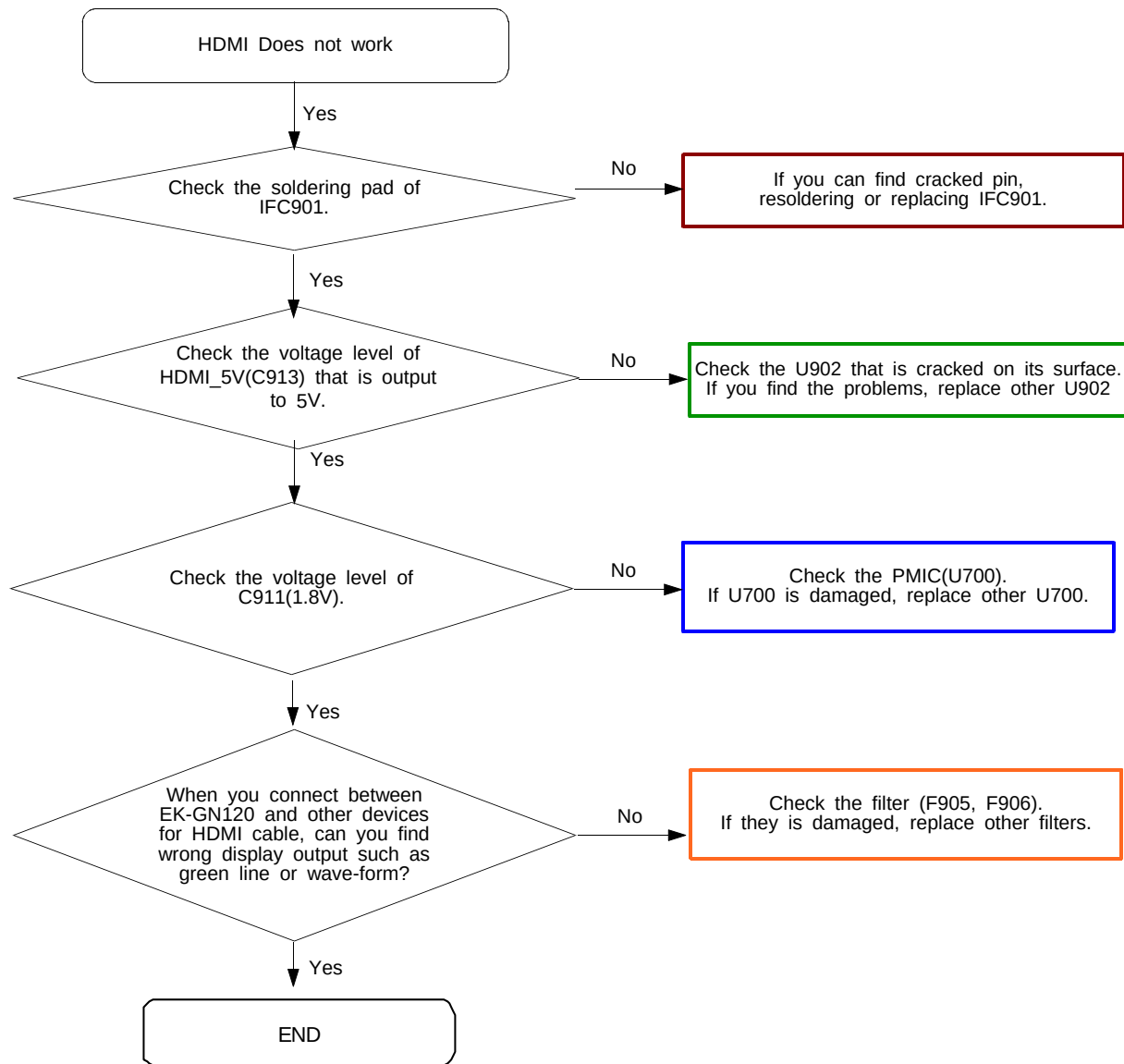


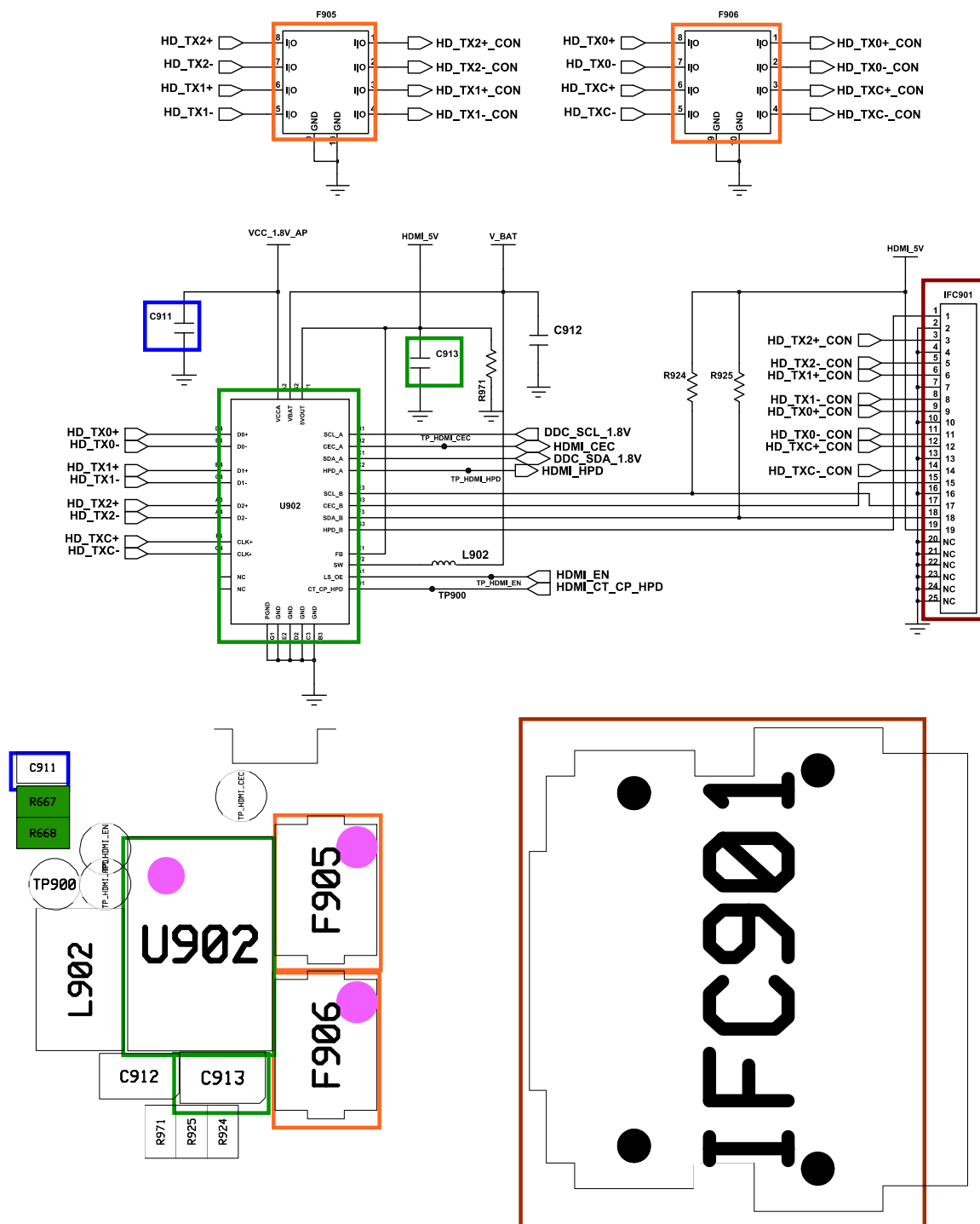


8-3-5. Sim Part

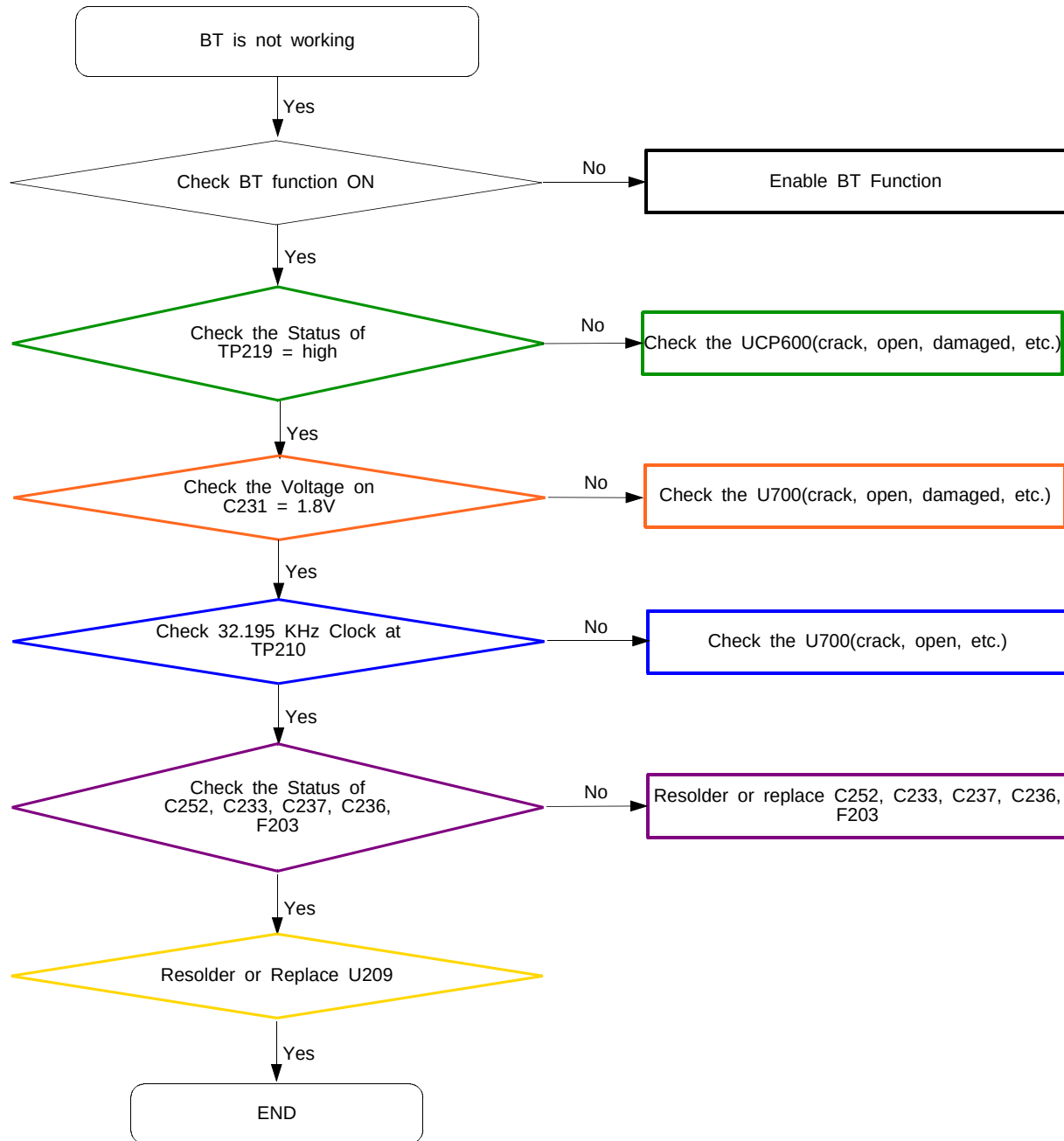


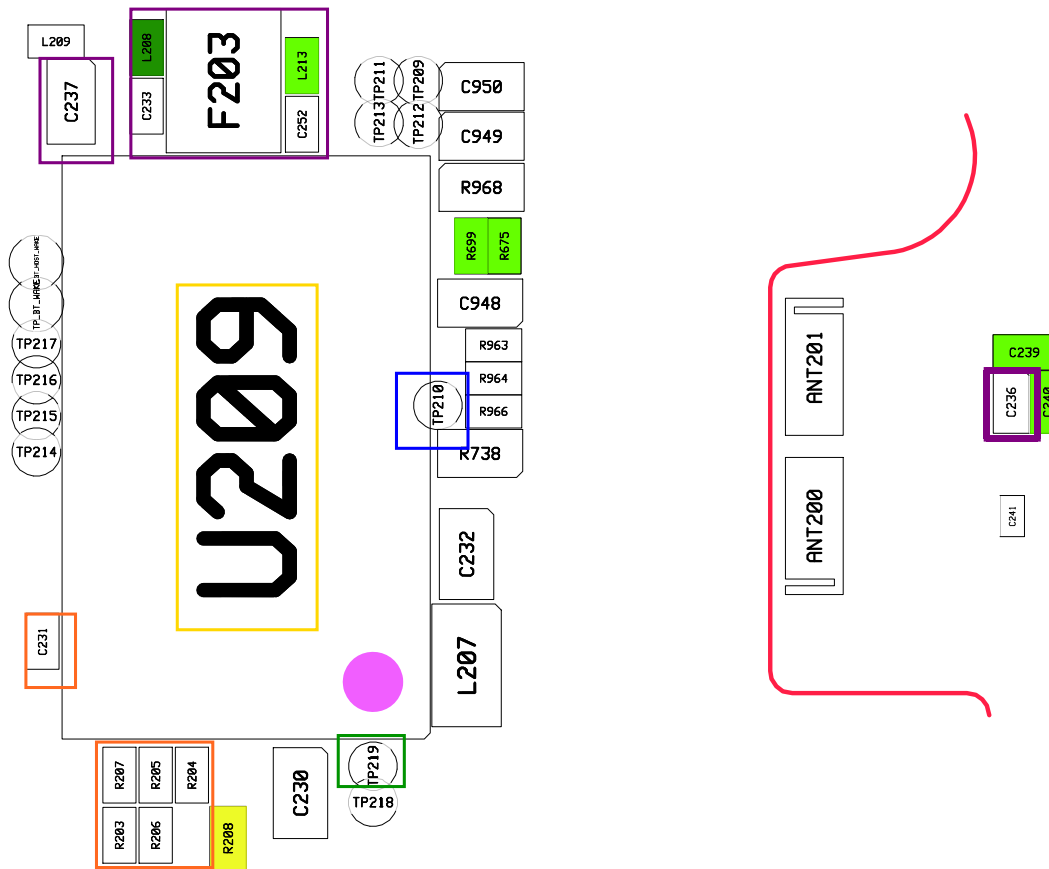
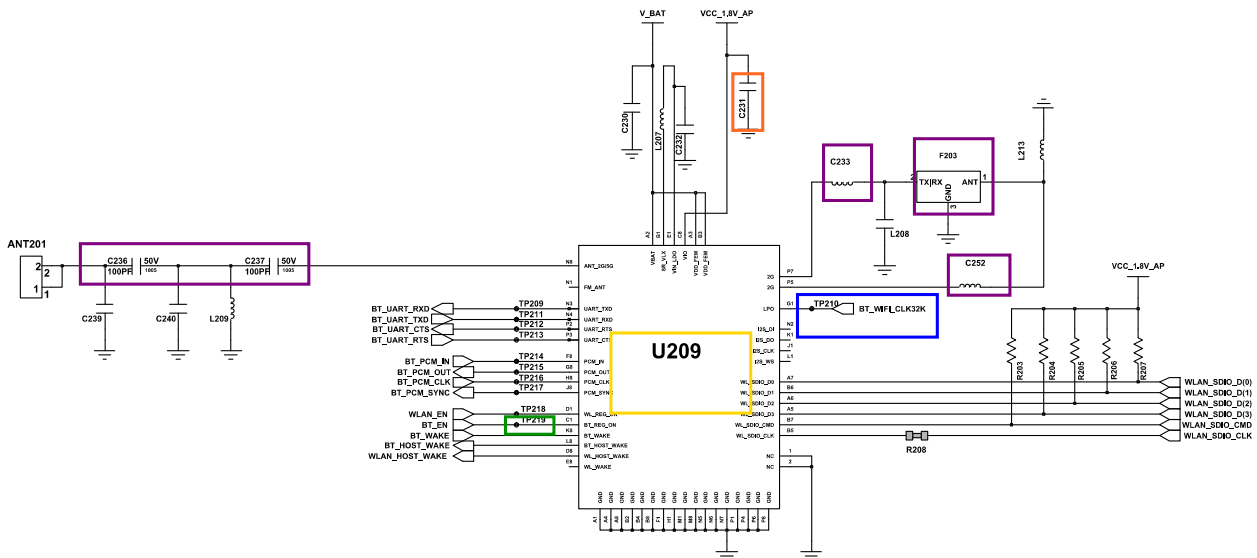
8-3-6. HDMI



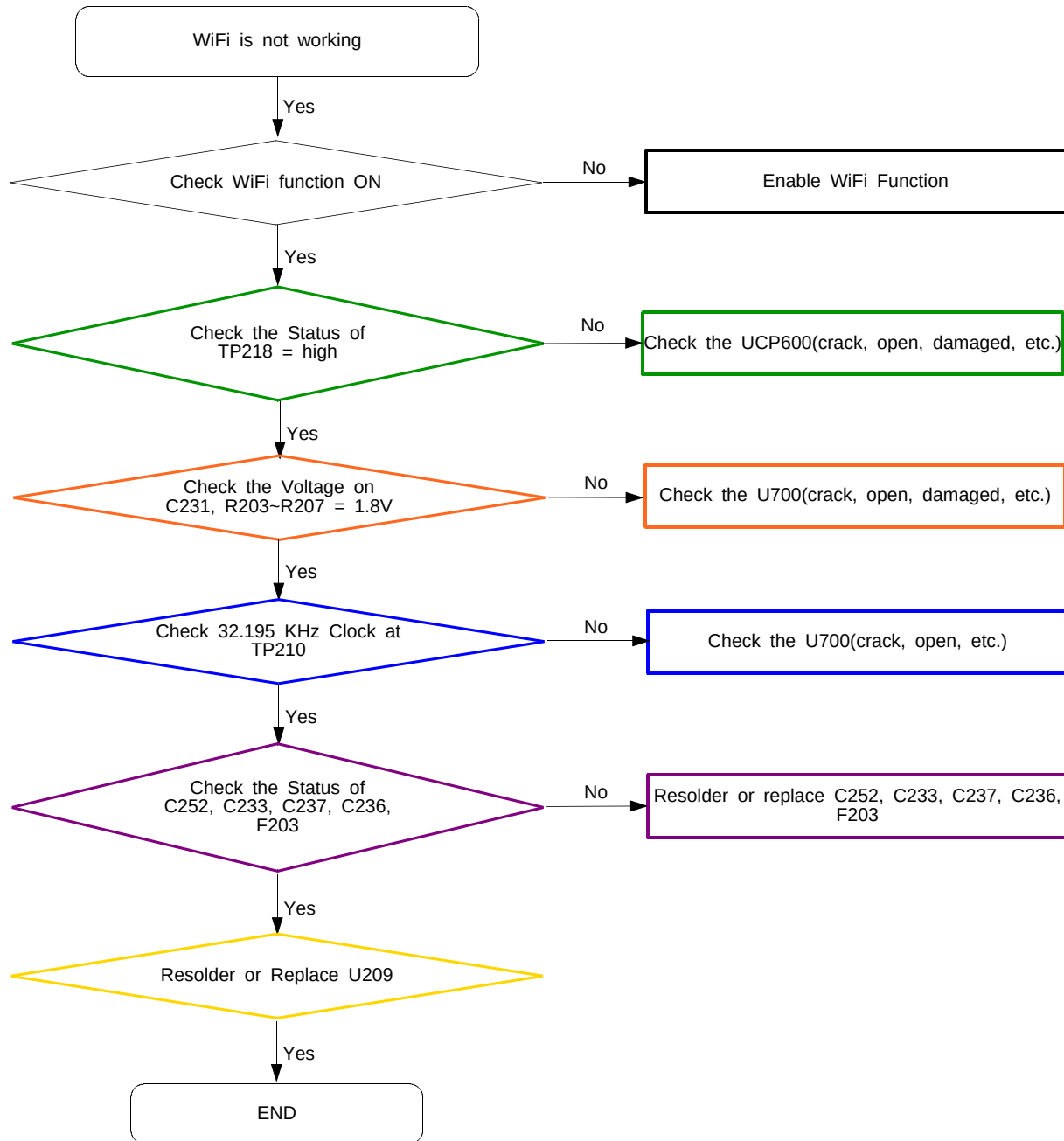


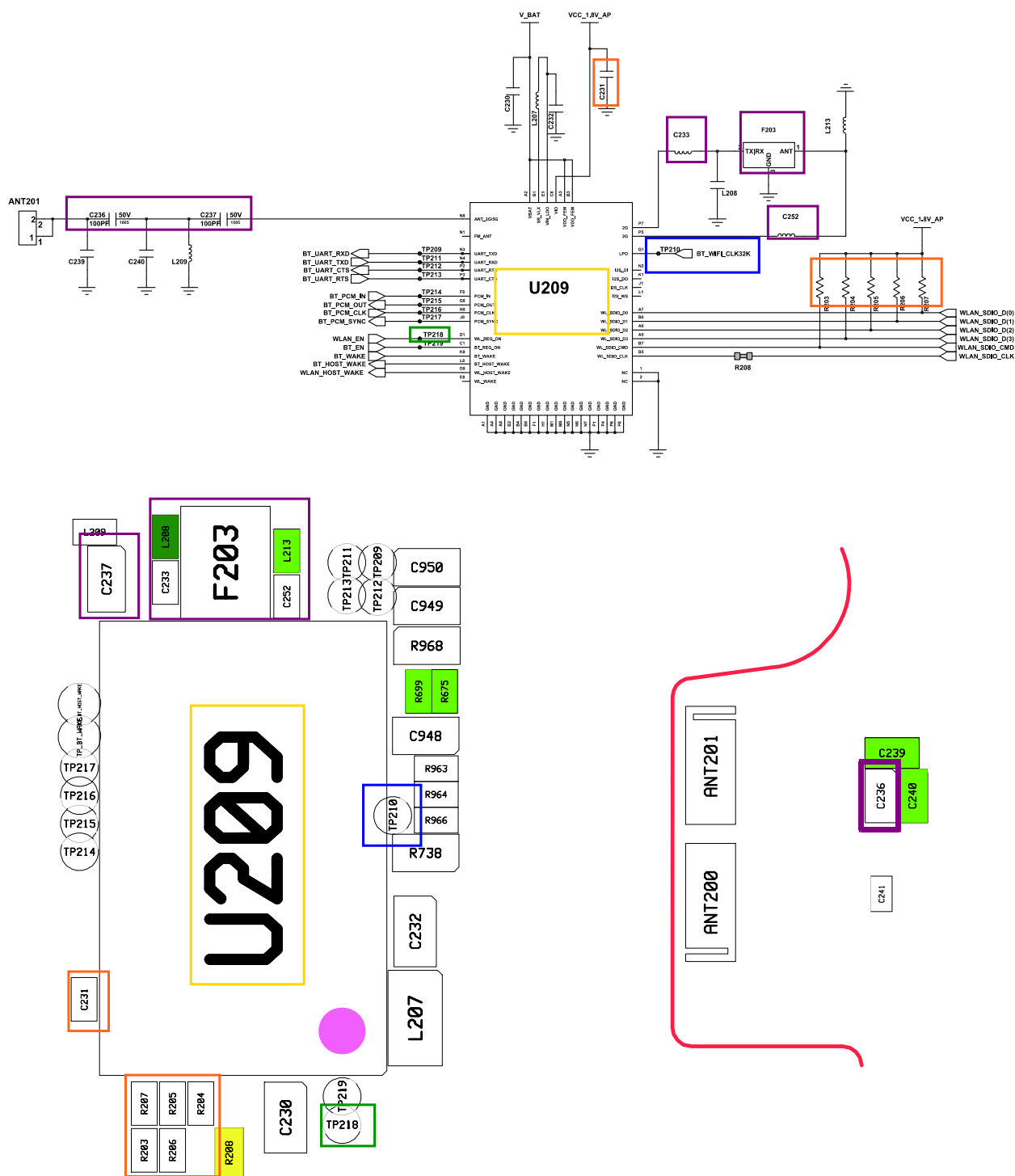
8-3-7. BT Part



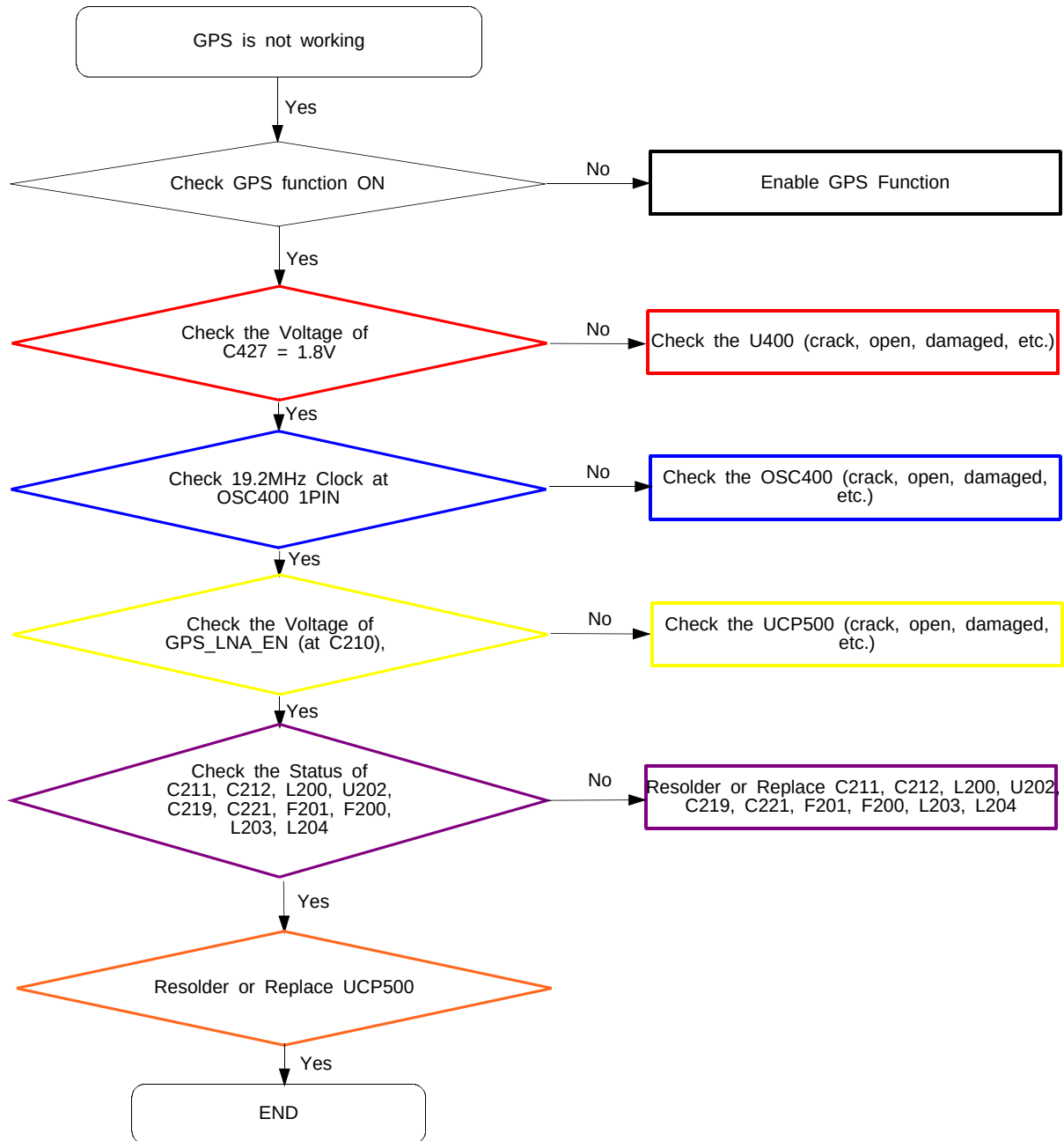


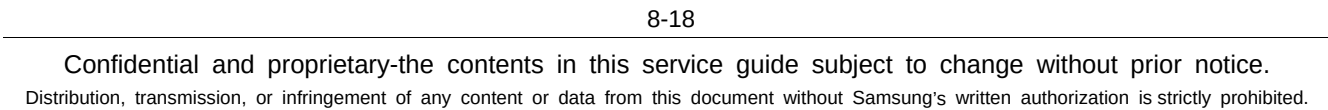
8-3-8. WIFI Part

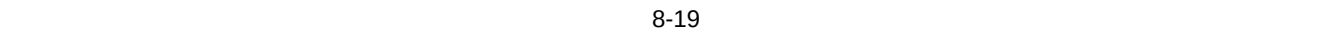




8-3-9. GPS Part







9. Reference Abbreviate

Reference Abbreviate

- **AAC**: Advanced Audio Coding.
- **AVC** : Advanced Video Coding.
- **BER** : Bit Error Rate
- **BPSK**: Binary Phase Shift Keying
- **CA** : Conditional Access
- **CDM** : Code Division Multiplexing
- **C/I** : Carrier to Interference
- **DMB** : Digital Multimedia Broadcasting
- **EN** : European Standard
- **ES** : Elementary Stream
- **ETSI**: European Telecommunications Standards Institute
- **MPEG**: Moving Picture Experts Group
- **PN** : Pseudo-random Noise
- **PS** : Pilot Symbol
- **QPSK**: Quadrature Phase Shift Keying
- **RS** : Reed-Solomon
- **SI** : Service Information
- **TDM** : Time Division Multiplexing
- **TS** : Transport Stream